THE

MEDICAL AND SURGICAL REPORTER.

No. 1340.] PHILADELPHIA, NOVEMBER 4, 1882. [Vol. XLVII.—No. 19.

Original Department.

Communications.

LIGATION OF PEDICLE AROUND DRAINAGE TUBE IN EXTIRPATION OF THE WOMB.

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Abdominal surgery has made such advances in these latter years, that operators are prepared to undertake risks which would not have been warranted in former times.

Excison of the kidney and bladder have been practiced with impunity; portions of the intestinal canal have been removed and the track continued by uniting the remaining free extremities. The extirpation of the ovaries, with the fallopian tubes, is becoming common; and ablation of the womb, whether in the gravid state or diseased, is recognized and practiced generally. So that it becomes the medical profession to investigate the conditions for safe procedure with this class of surgical cases.

The aim of every operator should be to avoid all the accidents which prudent forecast can prevent, in every surgical case; and the present inquiry is more especially directed to averting the bad consequences which are developed in hysterotomy, whether this be limited to a part, or extended to the entire organ. There has existed heretofore a difference of opinion and a divergence of practice as to the propriety and expediency of drainage in laparotomy; and the results of the various modes of proceeding have not tended to relieve the matter of the doubts which gynecologists have in regard to drainage in uterine surgery.

Under the widespread influence of Listerism during several years past, it is not a matter of surprise that the preconceived views of medical men should be unfavorable to the use of drainage tubes, which, at the same time that egress to noxious matters is afforded, give an opportunity for the entrance to a great or less extent of atmospheric air, with those impurities which have been considered a fruitful source of bacteria. But a new era is dawning upon prophylactic philosophy, and the hotbed of germs does not inspire so much dread now as the heavily charged vapors of carbolic acid diffused in a room with the delusive idea of rendering nugatory and inoperative the products of these miasms. This vain search for the invisible cause of trouble, which has brought greater trouble in its train, is fitly illustrated by a notable result in the experience of one of our most distinguished gynecologists, in one of our largest centres of surgical enterprise in America. With a view to have an operating ward put in the best possible condition for receiving cases of females for abdominal operations, the dingy walls were brightened and purified by a fresh coat of paint. What happened to the patients does not appear, but it has transpired that the operator received such an impression from the white lead and essence of turpentine, that he was disabled for weeks, from his detention during several hours in the said ward while giving his attention to an important surgical case, doubtless aggravated by the inhalations of carbolic vapor.

If the germ theory be well founded, all sort of contact with the atmosphere should be carefully avoided in any surgical operation what-

ever; but the results of experience on the part of some of the most distinguished gynecologists lead to the conclusion that atmospheric air is not such a bad thing as to require that it should be mixed with carbolic spray; and it is found that occasional contact of a wound or ulcerated surface with the atmosphere is not productive of serious consequences, notwithstanding what may be intermingled with its normal proportions of nitrogen and oxygen.

Should it appear, upon more ample investigation of the causes of blood poisoning after surgical operations, that the offending element develops within rather than from without, it may devolve upon the operator to look rather to eliminating promptly this *materies morbi* than to shutting the door to its escape by closing every outlet for a discharge from a wound. If the ordinary observation as to the mode of restoration in external parts holds good for the incised or lacerated wound of internal parts, it must be clear that in cases suited to the plan of occlusion, the union by first intention, or by plastic adhesion, must ensue, and failing to effect this most salutary process, the closure of any outlet becomes an obstacle to the cure by suppuration. The radical point for decision in the wounds of deep-seated tissues, is, whether they are likely to be aggravated by leaving a channel of escape for the hurtful elements, in all such operations.

It is evident, from the microscopic observations of Klebs, made in 1870, upon the results of gunshot wounds, that micro-organisms play an important part in the degeneration of the vital tissues; and the demonstrations of Cheyne go to prove that, while many acute abscesses may, no doubt, be caused by micrococci, yet, in some cases, they must be regarded as accidentally present as the result of some state of lowered vitality of the general system. Even Lister allows that many inflammations, more especially chronic inflammations, are caused by the nervous system, and cannot, in any way, be attributed to the presence of micro-organisms.

Thus it appears clear that we are not to seek *ab extra* for the explanation of the various degenerations of structure which occur as the consequence of surgical interference, and that the scarecrow of atmospheric germs is not a sufficient reason to seal up, as it were, hermetically, every wound that may result from accident, or in the course of an operation upon deep seated parts.

The real source of septicæmia is most certainly in the absorption of decomposed fluids that cannot find their exit; and it would, of course, forestall such a poisoning of the blood to allow, under all circumstances, a free evacuation of such disorganized matter by drainage.

Should there be no effete matter present, there could be no indication for a discharge, yet an open channel of escape can do no harm.

If the thief should have entered the house by some undiscovered route it may be well to raise the alarm, and leave a door open for his escape.

Two cases of rupture of the womb reported by Morsbach and Graefe, in which drainage by the vaginal canal was attended with salutary results, lead to the inference that a drainage tube may be used advantageously through the neck of the womb or through the vagina, under other circumstances than in accidents of this nature.

In the case of Morsbach "it was discovered that there was a rupture of the vagina and cervix uteri, and that the child was in the abdominal cavity, except one foot, which was within the uterus. The foot was seized and the rent carefully enlarged by numerous small incisions with scissors, till it would allow the child to be extracted. The hand was then inserted and the placenta, which was in the peritoneal cavity was removed. Two thick caoutchouc drainage tubes were put into the rent, and a pad of salicylated wool between the thighs. Slight pyrexia followed, lasting a little more than a week, with abdominal tenderness and tympanites. One drainage tube was removed the next day, and the other on the fourth day. The patient got up on the fourteenth day."

In the other case, reported by Graefe, "the uterus was found ruptured transversely, only about three fingers' breadth of its wall remaining entire.

"The peritoneal cavity contained much clotted blood and meconium. It was washed out with a 2½ per cent. carbolic acid solution, and then a thick drainage tube, thirty centimeters long, put into the abdomimal cavity and secured by a silk suture to the posterior commissure.

"After the sixth day the parts were irrigated from one to three times daily, through the tube, with a 2½ per cent. solution of carbolic acid. The tube was removed on the thirtieth day."

These cases being of much gravity, and ending satisfactorily, with the thorough drainage by tubes of large calibre, in one of which it was kept up continuously for a month, must go very far towards convincing gynecologists that the cavity of the peritoneum cannot only be washed out from time to time, but can be exposed to contact with the atmosphere without inducing

inflammation or disorganization in its delicate tissues. In both instances the child escaped into the abdominal cavity, and hence there could be no doubt of the laceration of the peritoneal sac, nor could there be any misapprehension in regard to the entrance of the drainage tube within its cavity, so that each case affords a fair illustration of the application of drainage through the neck of the womb in similar operations upon the abdominal cavity. The incision of the external wall of the abdomen does not present such a complication as to set aside the inference from its use in the graver conditions of laceration of the uterine fibres and the investing membrane.

If the abdominal cavity can be washed out with a 2½ per cent. carbolic acid solution, as was done in Graefe's case, and this same cavity left in free communication with the external atmosphere by a thick and long drainage tube, extending outside of the vulva, it goes very far toward setting the matter at rest in regard to the good result of drainage in this class of cases, and at the same time authorizes the reasonable expectation of it in all operations involving the peritoneal and cellular tissues within the cavity of the abdomen. It is well known that the complete exclusion of the atmosphere from any cavity in which blood may be effused favors its absorption without entering into decomposition, and that coagulable lymph may be assimilated under the action of the adjacent parts when shut off from the external communication with the air; yet, withal, serous collections within the peritoneal cavity, as a rule, give trouble, and purulent discharges from any injured surface are liable to be absorbent and induce septicæmia. In view of these unfavorable terminations after operative procedure, it devolves upon the surgeon to provide against such a contingency, and to discover the means of preventing the noxious influence of decomposition within the peritoneal cavity. But it is claimed that this tendency to disorganization does not manifest itself when operations upon the abdominal cavity are accompanied with proper precautions, and that the few cases in which it becomes developed do not authorize the adoption of a measure that is only requisite for these unfavorable results.

This reasoning would be sound if it were practicable to determine in advance the circumstances which lead to such consequences. But the data upon which to form such a judgment are deficient, and when an operation is completed under the observance of every antiseptic rule, there still follows untoward changes that end in decomposition and blood poisoning. These instances are avowedly beyond the reach of correction while the cavity is occluded; and it becomes a question whether to resort to some mode of treatment from the outset, that will obviate such a termination in any case, or to continue a course that must subject a portion, however small, of the cases to this unforeseen evil.

Laparotomy has been divested of many of the dangers which were its constant attendants formerly, and yet fatal consequences ensue, which timely measures might avert, while in others, the resort to evacuation of disorganized fluids, after constitutional disturbance has set in, has afforded such signal relief as to guide us in the future. Should the operator await such developments, or anticipate them by the adoption of a preventive plan of treatment? If it is satisfactorily established by the large proportion of cases in ovariotomy without any drainage, that a change in the mode of procedure would be unwise, this, still, cannot be said of the operations for the removal of the womb and its appendages; and it is here that we may reasonably look for benefit in a judicious application of a drainage tube through the neck that remains, or through the vaginal canal, in complete ablation.

The recent operations for extirpation of the womb with carcinomatous disease of the neck, practiced by laparotomy and through incisions of the vaginal wall, without drainage, and attended with good results, are very creditable to their respective authors, the former being done by Spencer Wells, and the latter by Fenger; yet these are isolated cases, and it is well known how the accumulation of cases changes the inference from statistics. It is worthy of remark, in connection with the success attending these two first excisions for disease of the neck of the womb, that the first only of Olshausen's four cases operated upon through abdominal incisions gave promise of being a success; yet "in this case malignant disease recurred in five months, and death followed sixteen months later;" while this operator cautions us against Bardenheiser's successful results after drainage, it is, he states, "in just such an operation as this that drainage is actually efficient, since in these cases blood and secretions come into contact with but a limited and acceptable part of the peritoneal cavity; and it must be maintained as effectually as possible during the last few days before it is dispensed with, since, when the opened surfaces of peritoneum are about to close, that is just the time when the

peritoneal cavity must be left free from fluids that may cause infection." This testimony of Olshausen in favor of drainage, being the result of a large experience in this operation, is most valuable.

Schröder's experience in this class of cases has been satisfactory, and he uses a heavy drainage tube, resting in the ununited peritoneal and vaginal wound, being retained in position by salicylated cotton wound around it. The results of Freund's extirpation of the womb, with drainage, are also encouraging, and in his view "the danger of the peritoneal aperture is no longer to be considered; indeed, that the keeping open of the peritoneal wound is highly desirable." The advantages of drainage in operations for extra-uterine pregnancy cannot be urged as a legitimate illustration in favor of it for other cases, when the treatment involves the consequences of fresh incisions; yet the untoward results of the occlusion, such as practiced by Goodell in his case, reported to the Obstetrical Society of Philadelphia, June 2d, 1881, should serve to guide operators in the future management of these cases. Tait's report in the "Removal of Uterine Appendages," in the January number of the *American Journal of the Medical Sciences*, presents a result, in case No. 1 of the series, that exemplifies completely the benefits of drainage in abdominal surgery. It is stated that "for about a month after the operation the cavity discharged freely, but then the opening began to close, and the patient suffered much pain. I, therefore, passed a double drainage tube through the cavity, and left it there about six weeks; I then removed it, and the whole track closed in a few days, and this patient remains to this day perfectly well."

A case reported by Thomas, to the Obstetrical Society of New York, April 5th, 1881, illustrates well the benefits of drainage, as the piecemeal steps by which the tumor was removed, and the violence inflicted by the forcible application of the clamps, might have been expected to induce serious consequences, in the unfavorable condition of the patient; yet, with proper drainage, even "the portion of the uterus caught in the clamp sloughed out entirely, and the cavity granulated from the bottom."

On the other hand, a similar case, reported by Dawson, Dec. 6th, 1881, in which drainage was not used, terminated fatally, and "on examination of the wound after death, it was found that the pedicle at the upper portion had adhered to the wound, but the lower angle of the wound was sloughy. Dr. Dawson believed that death was caused by septicæmia, due to the slough following the excessive traction and the pressure from the clamp." But the outside observer who looks impartially at the progress and result of this case, will not fail to perceive that the want of an outlet to the vitiated matter was the cause of the trouble, which might doubtless have been averted by a timely resort to the drainage tube. On the fifth day after the operation "the patient vomited, had diarrhœa, followed by chill, and died a few hours afterwards." If gynecological surgeons would act upon the time-tried precept "that an ounce of prevention is worth a pound of cure," it would save them from mourning over spilled milk, and of repenting, when it is too late to correct the omission of drainage.

The favorable results obtained in many cases, after threatening symptoms have made their appearance, by the adoption of drainage, should encourage the resort to some means of escape for decomposed fluids as a prevention of septic development. Not that a large extent of surface needs to be exposed, for this could not be requisite for the end in view. But some provision for discharge of vitiated matters is certainly indicated in the majority of operations implicating the serous and cellular tissues. If adhesive inflammation in all cases could be certainly counted upon, then, of course, there would be no exudation of fluids to enter into decomposition, and consequently no necessity for any outlet. But the plastic elements of the blood are not invariably disposed to form coagulable lymph, and when degeneration or perversion may ensue, cannot be uniformly anticipated. It thus turns out that we must provide against these cases in advance, and not leave the system to suffer from vicious absorption of fluids that nature seeks to eliminate, and which will find a way of escape if an outlet is left for them. The results of this open treatment of wounds by the German surgeon, Burow, with the use of the argilla acetici as an antiseptic, goes to prove that it is not the influence of the air upon the surface of the tissues involved that is to be counteracted, but the decomposition set up in these tissues which requires correction.

With these practical deductions from the results of experience we may put theory aside and proceed with the execution of such measures as offer advantages in the management of this class of cases, that present peculiar embarrassments to the operator. The difficulties connected with ablation of the womb arise chiefly from the mode of disposing of the pedicle when made through the cervix, and the process of subse-

quent treatment when complete extirpation is required. It will be allowed by all that any plan that may be effectual in securing the incised parts against hemorrhages, and provide for drainage, without any risk of septic developments, ought to commend itself to the consideration of gynecologists. I have, therefore, to suggest the ligation of the pedicle around a metallic tube passed within the canal, if through the cervix, or in the upper part of the vagina, when complete extirpation is requisite. This presupposes laparotomy; and while there are some cases in which the vaginal operation for extirpation of the womb may be expedient, it is generally preferable to proceed with the operation by an opening through the abdominal wall, thus affording a better guarantee for the removal of the organ with all its dependencies. Having made the necessary incision, and ascertaining the parts to be divided in separating the womb, the tube may be passed from the vaginal canal, within the portion that is to remain, and a strong silk ligature may be carried around the tissues, in such a manner as to secure them, outside of the tube, and thus firmly knotted, with the ends remaining each a foot long, to be carried outside of the abdominal opening and held by an assistant. With strong, curved scissors the tissues are to be divided immediately above the upper extremity of the drainage tube, so that the surface of the pedicle shall be on a line with the margin of the tube, thus admitting of a free outlet of any discharge. Should it occur that, in the separation of any collateral parts, vessels are divided which require ligation, the ends should be left, one for each ligature, sufficiently long to pass out through the drainage tube, with the two extremities of the cord that secures the pedicle, and thus carried together through the vagina and out at the vulva, to be tied with a tape around one of the thighs of the patient. If any blood remains in the pelvic cavity, it is to be sponged out with carbolized sponges; and afterwards an oblong carbolized sponge, with a thread passed through it, is to be drawn down into the tube, having the extremity of this thread fastened to the tape with the ligatures. All being thus secured, the external incision in the abdomen is to be closed, while the walls are pressed steadily and fixedly by assistants on each side, so as to expel completely all the air from the cavity. A compress with carbolized oil is to be maintained over the line of sutures in the external incision, and another placed over the vulva so as to preserve the labia in close contact. In this manner it may be expected that union by first intention will be effected promptly in the abdominal incision, and that drainage will be effectually secured.

It is requisite to have the tubes of different calibre, corresponding to cervical and vaginal canals, as the operation may be through the neck of the womb, or excision below the os uteri, through the vaginal canal. The cylinders of either kind should have a circular depression in the external surface, at a distance of half an inch to an inch from the upper extremity, according to the case, in which the ligature is to be fitted when it is tightened around the pedicle. With the intervening tissues which become separated gradually by the pressure of the ligature, there is formed an annular mass, which is retained in the loop resulting from the passage of the extremities through the circle of the ligature, so that, at the end of six days, the tube may be drawn downward until its upper end is on a level with the original line of ligation, and by drawing upon the protruding extremities of the ligature, this band of dead tissues will come away with the ligature, through the tube. The ligatures securing vessels within the pelvis may be left for a longer period, if it be thought necessary, drawing lightly upon each of these daily.

The sponge within the tube, having a thread by which it can be withdrawn, may be renewed daily, and if it should be found impregnated with foul discharges, a 2½ per cent. carbolic acid solution could be thrown up into the cavity and allowed to escape, so as to wash away any decomposed fluids, before replacing the carbolized sponge, or a plug of old linen, which may be more conveniently applied.

The lower margin of the tube should have a perforation through which a strong ligature is looped, and this of sufficient length to pass out of the vaginal canal, so as to be held by the hand of an assistant, when various manipulations are made, thus preventing the tube from moving upward; and this loop should also be fastened to the tape around the thigh in the intervals between dressings, with a view to prevent the escape of the tube into the abdominal cavity when released from the encircling ligation by the shrinking or division of the tissues. It will be observed that, at the outset, three separate classes of cords pass out at the vulva—the main ligatures around the pedicle, those used for tying the vessels within the cavity, and that attached to the lower rim of the drainage tube—all of which are to be fastened to the securing tape around the thigh. The first named

comes away before the others, and the last remains so long as the tube is continued in use for drainage.

After the detached band of tissues from the pedicle has been removed, the tube may be lowered in the canal, whether of the cervix or the vagina, so as to allow the circular raw surfaces to approximate and thus gradually close the opening into the cavity of the pelvis, as it is desirable that complete occlusion be effected when there is no longer any discharge. It will be found advantageous to give the tube intended for the cervix a slight anterior curve at its lower extremity, so as to adapt itself to the relation of the os uteri with the upper part of the vaginal canal when in position.

This curve should correspond very nearly to that usually given to the internal part of a tracheotomy tube, and the other straight arm of the drainage tube, which is to enter the canal of the cervix uteri, corresponds in its relation to the curve to that of the straight portion of a catheter to its curved part in the former, being each proportionally shorter, to adapt it to the surroundings.

In an emergency, a pair of the largest calibre of tracheotomy tubes could serve the purpose of drainage through the neck of the womb, filing away the fastenings from the outer cylinder, and placing the circular shoulder in contact with the os uteri, while the inner cylinder might be plugged with the carbolized sponge, or strip of old linen, being removed as often as requisite for washing out the cavity, and thus facilitating the changes of the material within the tube.

A carbolized sponge, or roll of carbolized cotton, may be impacted against the lower extremity of this extemporized drainage tube, thus maintaining it in its proper position, and this being shut up in the vagina by the action of its sphincter. With a dressing thus made, there would be no communication with the external air, except when the sponges were changed, and the parts being then washed out with a carbolic acid solution, it is presumed that even the most zealous of the advocates of antiseptic measures could not take exception to this proceeding.

In operations upon the eve of delivery, when the os uteri is already dilated, the diameter of the tube may be from a half to three-fourths of an inch; whereas, in those for the ablation of the unimpregnated womb, when the neck is in its normal state of contraction, the diameter of the tube must be less than half an inch, according to the necessities of the case, as observed by previous exploration. The cylinder which is adapted to the excision through the upper part of the vaginal canal does not require to be curved, and should have a diameter exceeding three-fourths of an inch, to be regulated by the circuit of the vaginal wall at the point of selection for the ligature. It is desirable that it should adapt itself smoothly to the exterior surface of the tube, without folds or wrinkles, under the closing of the ligature. As the length of the curved tube suited for the neck depends upon the extent of the pedicle, so as to descend for about an inch and a half below the opening of the os uteri; so the length of the cylinder for the vaginal operation must be modified according to the length of this canal in each individual case, so that its lower extremity shall be retained within the sphincter vaginæ. Thus it is clear that the operator must determine for himself the dimension of the tube or cylinder which may be requisite for the individual case, and it is hoped that the description given may enable any who approve of my suggestion to put it into execution. It should be understood that, in advance of any application of the ligature around the pedicle, the womb should be drawn forcibly upward, so as to put the vagina on the stretch, and at the same time bring the cervix uteri well above the bladder, thus facilitating the division of any adhesions with its wall, which must in all cases precede the incision through the tissues of the vaginal canal.

With this process of ligation around a metallic tube within the cervical or vaginal canal, it will be perceived that the obstruction of the circulation must be more effective than simply encircling the tissues. With a solid body within, the pressure will be secured by the ligature drawing upon the thin layer in contact with the tube throughout the entire circumference of the part enclosed in the loop, and the strangulation being carried to any extent that may be desired before tying the knot, will lead certainly to the detachment of the portion above the ligature within the specified period of six days. The death of this band of tissue is not likely to contaminate the adjacent parts under the use of daily ablutions with carbolized solutions until it is brought away through the tube with the surrounding tape ligature, and no further danger is to be anticipated from any other source.

The inconvenience of securing the pedicle in the external abdominal incision, as in Porro's operation, may be entirely obviated by this mode of treating it; and the embarrassments growing out of Taylor's plan of dropping the ligated pedicle, cannot ensue from this.

In view of the facility thus afforded for a thorough drainage and disinfection, excision of the womb must be freed from risk of septicæmia.

It is claimed that the adoption of this process would have the following advantages:—

1. Security against hemorrhage, primary or secondary, by the constriction of the tissues around the tube.

2. Efficient drainage and disinfection of the cavity.

3. Prevention of subsequent irritation by the removal of all ligatures before completing the cure of the case.

4. Maintaining the pedicle in its natural relation without any tension upon adjoining parts.

5. Closure of external incision by first intention, with the least possible delay.

6. Obviating the ordinary tendency to septicæmia.

If I am correct in attributing to this plan of operating a superiority over other modes of securing the pedicle, it is worthy of adoption.

This suggestion has been presented to the consideration of Mr. Spencer Wells, of London, and to that of Drs. Nathan Bozeman and J. Marion Sims, of New York, each of whom, without any endorsement of the proposed plan, encouraged me to present my view of its advantages to the medical public. In a letter of October 14th, 1880, from Dr. Sims, touching this matter, he remarks, "If a case should occur to me in which I thought your method would answer, I would adopt it, of course." As yet known, there has not been any application of it in the human subject, and it is simply with a view to bring it to the attention of gynecologists and surgeons generally, that this description is given, so that its merits may be tested by trial in some case suited to its use.

INCISED WOUND OF THE ABDOMEN, WITH PROLAPSUS OF THE INTESTINES.*

Translated from the Spanish.

BY AUGUSTIN M. FERNANDEZ, A.B., M.D.,

Of New York.

I. A. Guerra, a colored man, was wounded in the abdomen with a dagger, on the evening of February 20th, 1882, and brought on foot to the House of Emergencies (*Casa de Socorro*, literally, house of succor), of the 4th district of this city (Havana), a distance of about four squares from the place of the assault. The surgeon on duty, Dr. Edwardo F. Plá, gives the following account:—

"I. A. Guerra walked in at about 9 P.M., having a large wound on the right side of the abdomen, which was bleeding profusely, and allowed the passage of a large portion of intestines. The knife had entered the right side of the abdomen, at the anterior extremity of the eleventh intercostal space, its point coming out at the opposite side, one and a half centimeters distant from the synchondro-costal border, there forming an irregular V-shaped wound, the second branch of which had been caused by the sudden withdrawal of the knife; through this aperture there was hanging a piece of epiploon. I examined both wounds carefully, and finding the protruding parts to be intact, replaced them in position, and put nine sutures with thick vegetable (hemp) ligature to the anterior wounds, and two to the posterior one, taking in all the muscular as well as the tegumentary coats. The anterior (*i. e.* the lower) wound was almost horizontal, and of ten centimeters in length."

Diagnosis.—The question of any abdominal viscera being injured was undecided.

Prognosis.—Death.

Treatment.—Besides the proper attention to the wounds, Dr. Plá ordered an opiate, ice water compresses, rest in bed, and absolute abstention from all kinds of food.

February 21st, A.M. The patient is alive, and his strength, voice and intelligence are perfectly normal. He complains of pain in the posterior wound. There is diarrhœa. Pulse and temperature normal. The dressing was removed, and the wounds bled very little. The opiate prescribed by Dr. Plá was ordered to be continued, and the compresses of ice water substitued for compresses wetted with ice-cold "*água de la pildora*,"* to which a few drops of laudanum were added. Only small doses of chicken broth allowed as nourishment. Evening of the same day. A little coughing, of no consequence. The diarrhœa continues. Temperature 38° C.

February 22d. Wounds again dressed. No material change. Temperature 37.5° C. This condition continued throughout the night.

February 23d. The pain has disappeared. Four sutures of the anterior wound, and two of the posterior one are cut off. The diarrhœa continues. Temperature 37.2° C.

February 24th. No change. A blood clot,

* This very interesting case was reported in the *Cronica Medico-Quirurgica*, of Havana, Cuba, June, 1882.

* This is an empirical Cuban preparation. It is composed of pure water, to which a few grains of the sub-nitrate of mercury are added. (*Obs. of the translator.*)

which had been forming in the posterior wound, came out. Two more sutures of the anterior wound are cut off. The diarrhœa continues.

February 25th. All continue the same as the day previous.

February 26th. The last sutures are cut off. The anterior wound is almost cicatrized, and the posterior one only lacks union for a distance of about one centimeter in its centre. The diarrhœa has disappeared.

March 3d. No material change has occurred during the four days past. The posterior wound is already cicatrized, and the anterior one only lacks union in its centre.

In the report sent to-day to the civil authority, in whose hands the prosecution of the assailant rests, it is stated that, eleven days having elapsed since the time of the stabbing, there is reason to believe the danger from the most serious complications likely to arise in this class of wounds is passed over.

March 4th. Last night the patient had a severe pain all along the track of the wound. There is a little swelling on the right side of the abdomen. The patient has not had a passage from the bowels for two days. The pulse is natural, temperature 37.4° C. There is no change in the countenance. All these circumstances lead me to suppose there is no danger of any serious complication. I ordered a laxative enema and an opiate. Evening of the same day. I dressed the wound again; the pain along its track continues. The opiate has not yet been sent for, but being got, a dose was at once given in my presence. At the second or third dose the pain was relieved. During the night the patient ejected large quantities of gas and excreta. He must have eaten some solid food, against my positive order not to do so, although he denies it. I desired a consultation to be had, so as to clear my mind in regard to the true cause of this slight complication, but the patient refused it. It was afterwards proved to be a flatulent colic, due, probably, to the nature of some ingesta taken.

March 5th. All continue well.

March 8th. No important change during the last three days. Only about two centimeters' length of the anterior wound lacks cicatrization. The patient is nimble, and feels strong; can walk, and is able to get in and out of his suspended cot.

March 10th. Keloid appears. Cauterization with nitrate of silver, repeated every two days.

March 18th. There is complete cicatrization, and the patient is in perfect health.

Such a remarkable case of incised wound of the abdomen, in which there was no peritonitis, no complication of any account, and complete cicatrization in 26 days, is certainly surprising. The tolerance of the peritoneum to such a terrible traumatic injury is wonderful. It is my opinion, therefore, that a simple record of this case, without any commentary or claim to any especial treatment on my part, is sufficient to justify this hastily written report.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINICAL LECTURE BY ALONZO CLARK, M.D.,

Professor of Pathology and Practical Medicine.

Phthisis.

A male patient, about 35 years of age. In answer to questions the patient states that his trouble is lung or throat disease; that he is short of breath, gets out of breath on going up stairs. He can lie on one side as well as on the other; does not have to elevate the head greatly with pillows. These questions were directed to the possibility of there being heart disease, and we do not make anything very positive about it. Now we turn to the lungs. He says he has a cough which troubles him at all times of the day; he raises greenish matter; not enough to fill a teacup in twenty-four hours. He has never coughed up blood. He says his father died of asthma. He does not remember whether he had a cough or whether he spit up blood. Persons, however, do not usually die in a paroxysm of asthma; the disease goes on and on, paroxysm after paroxysm, and there comes then a chronic bronchitis and an emphysema of the lungs, and they are almost always found to die of some intercurrent affection. The asthma has weakened them very much, they have not the usual power of resistance, and when a disease which they might otherwise have withstood assails them they are likely to sink under it. And the fact that his father had asthma, or at least, as he supposes, he had asthma and died of it, renders it very likely that he may have had phthisis. His mother died at a good age, he thinks of dysentery. None of his brothers or sisters died of phthisis. So we do not make much in the direction of possibility of hereditary phthisis.

He has had this cough for two years, and he thinks it is no worse now than it was a year ago; he has not lost weight, but if anything, thinks he has gained some. So we do not get anything very decided out of the rational signs in this direction. That he has had a cough two years makes it presumptive he has phthisis. He has not spit blood; he has not become more emaciated; these are two facts that are on the contrary side, and we have nothing left but to examine the chest.

Disease of the heart I think is rather excluded by the rational signs, but perhaps not positively. There is scarcely any observable prominence in

the region of the heart, as you will see. You can see a slight impulse of the apex against the chest wall, and there is a more apparent pulsation in the region of the epigastrium. The apex should be three inches and a half from the median line and about an inch below and within the nipple. In this case it is a little too far from the median line, being about three inches and three quarters.

I listen here near the base, to ascertain whether there is a murmur at the aortic opening. The two sounds which I hear here are the first and second sounds of the heart, which are perfectly clear; there is no purr, no prolongation, no unusual sound; the same is true when I listen over the apex; so that we may pretty fairly exclude the heart in our diagnosis, with the exception, perhaps, of a quarter of an inch in size larger than it should be. The size of the heart naturally varies with the breadth of the shoulders. If a man is very wide shouldered he may have a heart a little larger than another who is narrow. This man is about average in that regard, I judge.

Now, we will examine with regard to the lungs, and something strikes me at once, as I expose the chest, that is, a very marked shrinkage of the chest on the right side, at the apex, which is very significant. There is quite a large pit upon the right side which you do not see upon the left. As I listen to the breathing I am to determine two things: first, the tone of the respiratory sound, whether it be exalted or flattened; and second, whether the expiration is altered. In a healthy state of things the expiration should be heard to about one-fifth the length of inspiration. Just as it begins you can hear a little murmur, and then it is extinguished. The inspiration, however, you can hear during all the time of its continuance. If there is anything that makes the expiratory sound longer than it should be, it is some condensation of the lung enabling the tissue of the lung to conduct the sounds which are produced to the surface. Then, if the expiration is longer than the inspiration, or if it be markedly prolonged, there is reason to fear that there is consolidation, from some cause. It may be pneumonia, not fully consolidated; it may be a tumor conducting the sound; but in nineteen cases out of twenty, it is phthisis.

This is a Yankee notion, the value of prolonged expiration in the diagnosis of phthisis. Perhaps some of you may have heard of the reputation and far fame of Dr. James Jackson, of Boston, who lived to a good old age, and was greatly respected throughout New England and wherever he was known. He had a son named James, and after he had completed his college education his father sent him to France and put him under the tuition of Mr. Louis. One day, as he was listening to some patients in charge of Mr. Louis, he observed this prolonged expiration. After a little time he had another opportunity, and he observed this prolonged expiration again, in a phthisical person, and after three or four observations he communicated the fact to Mr. Louis, who had not noticed it before, and nobody had noticed it up to that time. Mr. Louis examined some patients and found it to be a valuable indication of physical changes in the chest, so that it is, as I told you, a Yankee notion, discovered, to be sure, in Paris, but by a person destined to live in America; but he died early, unfortunately.

This prolonged expiration we have here. The next point is to ascertain whether the sound of the voice is longer upon this, the right side, than upon the other. Yes, it is twice as loud here, and the tone is a little different. It is a little higher pitched, and has a great deal more volume. Another point, the amount of vibration which the voice produces upon the two sides. I perceive fully twice as much jar on the right side.

There is another evidence with reference to consolidation. That is, the difference in the percussion note on the two sides. It is considerably higher on the right side than on the left.

I also hear the voice quite distinctly, louder on the shoulder on the right side than on the left. I cannot discover a râle. It is an important thing, however, if you can find it.

The increase of resonance I follow to the lower angle of the scapula, and down here I get a new fact; the voice here seems to be extinguished, or seems to come from a distance. It loses all there is in its volume. Now, the question is, what produces that? The most common thing is a pleuritic effusion. It may be that this is below the lung, and that consequently there should be no voice sound here. I have observed that the extent of the healthy lung below the scapula is equal to the width of my hand with the thumb spread, while in this case the point of dullness is found an inch and a half inside of that distance. We find that this side of the chest in this region does not move as freely as the other when he breathes deeply; the amount of restraint in it, however, is not very considerable; still, what there is is worth noting, as it helps us in the diagnosis. This inch and a half of fluid, this shrinkage of the chest, and the movement less distinct upon this side as compared with the other during respiration, are three facts that point to pleurisy. The pleuritic effusion has been greater than it is now, as is pretty evident from the skrinking. He is nearly over it. The fluid has subsided until there remains only about an inch and a half, in a wedge-like form, made by the chest on one side and the sloping diaphragm on the other. The quantity is really very little, and unless it is confined by adhesions I can show that to you. When he leans over the counter I get the voice sound distinctly down to here, which is nearly two inches below the position at which I get it when he stands. We make out, then, that he has or has had some pleurisy. He says, however, he has not had any pain at any time in the side. So we have no evidence there in favor of pleurisy, but still there is water here. That is demonstrated by the fact that there is dullness on percussion at the same line where the voice seems to be partially extinguished in going from above downward, and from the further fact that the side is shrunken, and also from the fact that it does not move as freely as the other on respiration.

We find, then, that he has evidence of con-

solidation of the lung under the right clavicle, and that it extends downward under the scapula to the inferior angle of that bone; that the voice is about natural below that, until we get down about the width of my hand and a little more, and then the voice is extinguished again and dullness on percussion appears. It disappears when he lies upon his belly and comes again when he assumes the erect position. Then the cough, which has continued for two years, almost invariably; if there is much expectoration associated with phthisis, you get a pretty clean diagnosis; phthisis of the right lung, and pleurisy that is probably consequent upon that disease, but now getting well.

Then the question is, what shall we do for him? The secondary disease, pleurisy, is getting well; it will be safe to leave that to itself. If it were not, then some diuretic would help him. And a favorite one with me is the bicarbonate of soda—it is an old prescription, older than I am, a great deal—carbonate of soda, half an ounce; water, six ounces; a tablespoonful of that with a tablespoonful of fresh lemon juice mixed together and taken every two hours: then add a dessertspoonful of the infusion of digitalis three times a day. In three persons out of four it will produce marked, or at any rate, sufficient diuresis to carry off the fluid of the pleurisy when the inflammation has abated. And if this patient should need anything in that line, that would be as good as anything he could take.

Then, with reference to the phthisis, he must build up his system and maintain his strength as long as he can. Two years and no cavity, is perhaps a favorable condition, and the additional fact that he has not emaciated, or if he has, he has regained what he lost, is worthy of being taken into account in the prognosis. You remember, we did not find any positive evidence of hereditary disease of that kind. His father, as you heard, he thinks died of asthma. That certainly is doubtful; there is a greater chance that it was phthisis than asthma, and if so, then there is an element in the prognosis that is of some importance. Inherited phthisis is not as curable as that which occurs spontaneously in the individual. Yet you will sometimes observe that even those who are hereditarily predisposed to it will recover. The common opinion is that consumption is death, or equivalent to it. But in my own observation hundreds, and I do not know but I might say thousands, have been prescribed for in the early stage of phthisis, and have thrown it off wholly.

The treatment is entirely corroborative. There is no specific, and notwithstanding the many advertisements of waters and medicines that will cure the consumption, there is nothing of any value in any of them. The whole thing consists in three or four very plain and simple facts. First, a free exposure to the open air. An indoor occupation is unfavorable to a favorable result. The person should be out of doors. If he is strong enough, walk out of doors many hours of the day. And one means by which he can occupy his time profitably is by riding on horseback. So long ago as when Sydenham wrote, which is two hundred years, horseback exercise has been famous for its favorable effects upon phthisis. Indeed, Sydenham says that horseback exercise will cure consumption as Jesuit's bark will cure the fever and ague. He is reported to have said that horseback exercise will cure consumption if mercury will cure the French pox, but he did not say it. At least, if he said it, he did not write it in his book.

The value of horseback exercise is very well illustrated in a case I had last spring. A young man was getting worse and worse every week, with phthisis. When February came I told him to go to Aiken, hire a horse by the month, and ride every day, twenty to twenty-five miles. Of course he could not do that well the first day, or the second day, or the third, for riding, to a person who is not accustomed to it, produces a good deal of soreness of the muscles. He worked into it, and at length after a week or two he was able to ride the prescribed amount, and within a fortnight he wrote that his cough was cured; that he was gaining strength every day. He continued that for about a month or a little longer, and then was so well that, against advice, he insisted upon coming home. He came home and had no cough for a fortnight, but the cough came on in bad weather of spring again, and he has perhaps gained a little during the summer, but still coughs. He ought to have remained longer and taken his exercise there, as prescribed, for a longer period. But we can hardly prescribe that for this man, for, of course, horseback exercise is not a very cheap entertainment in New York. But he can be in the open air; he can sit in the parks.

The next point is the food; oily food is almost essential. Everybody knows the reputation of cod-liver oil in such cases, but the same kind of food can be obtained in other ways, ways that we might almost call more natural. The cow's milk contains, of course, butter, when it is fresh, and that is an oil favorable to improvement in phthisis. I have everybody that has tubercles of the lungs to drink milk, from one to two quarts a day, and in addition, those who are able to meet the expense, a half a pint of cream in the course of the day. The cream, to most persons, is very acceptable, and is for them a very happy substitute for cod-liver oil. The cream is taken on hominy, oatmeal stir-about, baked apples or peaches, when they are in season, and most people think that it adds to the taste and is a luxury.

Then, in regard to solid food, the most nutritious are the best, and there is none better than beef; roast beef, beef steak. I have not come to the feeding of my patients with raw beef, because it is unpleasant to me, and I do not believe that there is any particular virtue in rawness. But to eat well and to exercise sufficiently to secure good digestion are the main points in that direction.

Then I think some virtue can be found in friction to the surface of the body. I do not use counter irritants, as that word is commonly used; that is, no blisters, no moxas, no setons, but friction with dry flannel to the whole body once, or if convenient, twice a day. The flannel is electrical in dry, cool weather, and perhaps there is something stimulating in that, but at

any rate it seems to be about the best thing for applying friction, and it is to be applied to all parts of the body, excepting the neck and face, where it is inconvenient to apply it. The most convenient time is before one dresses in the morning and when he retires at night. This I urge a good deal.

Then, for medicines, nothing but what the particular symptoms require; that is, if a man has impaired appetite, the compound tincture of gentian, a teaspoonful in a tablespoonful of sherry, will often awaken it. I saw an old lady who was dying of cancer of the liver, some time ago, and I advised that she should take the citrate of iron and quinine in lemonade, and when I saw her the next time she said, "Doctor, what a wonderful medicine that was you prescribed for me last week. Before I took it I could not eat anything, and now I have to call the girl up in the night to give me bread and butter." Several of the tonics act favorably in that way, but perhaps the compound tincture of gentian, or the compound tincture of the bark given in a little wine, will be, in the greater number of cases, the best one. How is your appetite? "It is good." Then he does not need anything to help that.

Doctors are very apt to give cough medicines, but almost any cough medicine that is efficacious contains more or less of opium, and the opium, in about half those who take it, impairs the appetite, in the morning particularly, and perhaps all the day. I prefer, when anything is necessary, an inhalation which does not affect the stomach. The inhalation of steam is a pretty good thing. Have the patient breathe the vapor of water for four or five minutes several times in the course of the day. I do not know that it does anything more than soften the mucus and enable the patient to expectorate it more easily, but it seems to be very good. Then there is another inhalation at my suggestion, where the cough is exaggerated, and by that I mean where it is more than it ought to be for the raising of the amount of material that is secreted in the bronchial tubes. It will do it marvelously sometimes. Dissolve two grains of the extract of opium, which has been dissolved before, in three ounces of water, and if you choose, add a very small quantity of glycerine, have that converted into a spray and breathe into the lungs. The little apparatus, with a bulb that is compressed and makes the spray, can be held by the patient himself and the mouth opened. The moment inspiration begins, he compresses the bulb and the spray is thrown into his mouth, perhaps into his face, some of it, and he breathes it in with his breath about seven or eight times in succession. Perhaps I can enforce the value of that point by referring to a case.

A lady came to town some years ago with her daughter. The daughter may have been twelve years old, and she had a cough that was constant. No expectoration in any amount, but coughing every second breath. She did not cough while asleep; that is, she was not awakened by the cough, and that led me to suppose it was dependent upon nervous excitability more than upon the secretion in the bronchial tubes. She went to a hotel, arriving in the city at eleven o'clock at night, and the next morning she brought her daughter to the table, to breakfast, and the cough continued just as before, and directly there was a person speaking to her, that is, to the mother. He said, "I observe that your daughter has a bad cough. I am a physician, have an office in this hotel, and if you come to me after breakfast, I can prescribe something that will relieve her." She said, "No, I came to the city with the intention of seeing Dr. Clark, and I think I had better keep my purpose." And he urged a little, and when the lady went to her room she found a stranger there, a woman, who introduced herself as Mrs. Dr. So and So, and she came to see if the lady, being a stranger in New York, would be aided in any way in her viewing the city or shopping; she would be very glad to lend her assistance to further the aims of the stranger. And the attention was so pressing she concluded she would go and pay the doctor a visit, as that was the thing aimed at by both the Doctor and the Doctor's wife. And she went, and he prescribed for her, and the next morning the cough was all the same, not modified at all, and she concluded she had better keep her first purpose and come to me. I prescribed for her a medicine, an inhalation that has done a great deal of good in other cases, that is, the tincture of balsam of tolu and Hoffman's anodyne, which is ether as you know, mixed in equal parts, and a few drops put into a warm cup. The exhalation is pretty nearly pure ether and the alcohol, with some of the balsam dissolved in it, and that, breathed a few times, will frequently allay a similar nervous cough. I prescribed that, but it did not do. She came back the next morning and coughed the same. Well, I said, now what invention can I make that will just meet this case? She was very sorry to have the Doctor's ears annoyed every morning at breakfast by this cough. Then the thought of dissolving the extract of opium in water, and administering it as a spray, occurred to me, and I prescribed it. The lady came back to me, and she said, "after my daughter breathed two or three times of that medicine you gave her, she had no cough, and she has had none since." Coughs that are in great degree nervous, that is, a cough that is out of proportion to the occasion of it, will yield to that inhalation frequently and very quickly, and I prescribe it very often.

A lady came to me, for example, with pretty marked signs of phthisis. The cough was urgent and I prescribed this, and in a couple of days she came back to say that she was much better. She was not well, but she felt so much better that she flattered herself that the disease was removed.

In general I say cough medicines are not good. Then with reference to the Churchill remedies: I have not learned to have much faith in them—the hypophosphites—and yet I do very often give them, and have it continued for months—the hypophosphite of lime. I do not know that there is any particular virtue in Fellows' preparation. If you have a good druggist you can rely on him for the choice of medicines. So I prescribe, without naming what preparation, the hypophosphite of lime, five grains three times a day.

Lately a new principle seems to be getting some rational foundation, the inhalation of germicides; the inhalation of medicines that will kill the creatures that make phthisis. Some of you, perhaps, do not know that within the last year, not for the first time, however, there has been brought forward very plausible cases going to show that parasites or germs are the source of irritation which produces phthisis, and only yesterday I heard of a case that seemed to have some significance. A gentleman came to me four years ago, having phthisis, and this was before Cox's discovery, and I advised him to inhale the spray of carbolic acid, one drop to two hundred. He got his apparatus and he began to breathe it, and persisted in it, and in a short time, two or three months, his cough left him, and he has since been well. He came to show himself before me yesterday or the day before, and he ascribed his recovery entirely to the inhalation of that carbolic acid, one to two hundred of water. It is not well to prescribe that unless you have some supervision of it. It is somewhat irritating, and you want the means of reducing the strength of the inhalation if it is irritating, and the patient should call upon you pretty often unless he has gotten pretty well under way of it.

But the greatest thing, after all, is full nutrition, exercise in the open air, and the administration of milk and cream.

EDITORIAL DEPARTMENT.

PERISCOPE.

Spasmodic Stricture of the Œsophagus.

At a recent meeting of the New York Medical and Surgical Society (*New York Medical Journal, Obst. Rev.*)—Dr. Francis Delafield narrated a case as follows: The patient was an unmarried woman, twenty-three years of age. He saw her first on the 16th of February, 1882, when she stated that she had always enjoyed good health until eighteen months before. At that time she began to suffer from attacks of severe pain, which was referred to the region of the lower end of the œsophagus. These attacks occurred about once a week, lasted ten or fifteen minutes, and had no relation to the taking of food. They sometimes occurred in the night, sometimes in the day. There were no other symptoms whatever. After three months she experienced difficulty in swallowing solids, and subsequently in swallowing liquids. At length she could take no solid food, and liquids could be swallowed only at times. On some days she could swallow nothing whatever. She starved to a certain extent, but had no other symptoms. Menstruation continued regular, and there were no neurotic symptoms. Dr. Delafield was able to pass a large œsophageal tube into the stomach, and he therefore supposed the case was one of spasmodic stricture of the œsophagus, and at first attempted to treat it by passing the bougie every day, under which she seemed to improve for a time only. On some days she could swallow fluids, but oftener she could not, and as she gained nothing in weight she was taught how to introduce half a pint of milk and half a pint of cream, mixed, into the stomach, through the stomach tube, to be repeated once a day. Besides, she was to try to eat regularly. She had done this since the 9th of March, and during all this time had been able to eat solid food at any time in the day, but it was her custom to eat an ordinary meal for breakfast and dinner, and to take the milk and cream, in the manner indicated, in the evening. From her normal weight of 125 pounds she had fallen to 99 pounds, but after adopting this plan she had gained 14 pounds. It was probable, however, that, like some cases of spasmodic stricture which had been reported, this one would continue for a long time.

Dr. R. F. Weir suggested that possibly the stricture might be overcome by over-distention, as in cases of stricture of the rectum or urethra. An œsophageal tube, with a rubber bulb at the lower end, which could be distended with water, might be arranged for the purpose.

Dr. F. N. Otis remarked that a very slight amount of force would sometimes overcome spasmodic stricture of the urethra, and such might perhaps be the case with the œsophagus.

Dr. Delafield thought that in the so-called spasmodic stricture of the œsophagus there was no particular resistance to the passage of the bougie.

Traumatic Injuries of the Liver and Hepatic Abscess.

Dr. W. S. Elkin has made some interesting researches on this subject in the Pathological Laboratory of the University of Pennsylvania, all the results being verified by Dr. Formad, the microscopist to that institution. He reports them in the Atlanta *Medical Register*. He says, "By a series of careful experiments I think I am able to prove that gunshot wounds of the liver, not involving its large vessels, are not fatal, and that they will heal without the development of any serious constitutional symptoms. Furthermore, I will endeavor to show that we can detect in the pus from liver abscesses, liver cells, which fact will be an invaluable diagnostic point.

Gunshot wounds were inflicted on the livers of large dogs, while irritants were resorted to in the cases of small dogs.

In shooting the animals, care was taken not to wound any of the larger blood vessels of the liver, or injure any of the surrounding organs.

To accomplish this, the ball was made to enter the body of the animal between the seventh and eighth or eighth and ninth ribs, and range so as to penetrate the liver and lodge in the muscles of the back, to the right of the spinal column. The size of the cartridge ball was No. 22, long.

Injections were made in the liver, usually, between the seventh and eighth ribs. The hypodermic syringe used for this purpose had, instead of the ordinary short, delicate needle, a large, stout one, two and a half inches long, which could be made to penetrate deep into the liver structure. The irritant used was tincture of cantharides, U. S. P.

The animals were kept alive from ten to twenty-five days. Immediately after the death of the dog the liver was removed and put in dilute, and after twenty-fours, into stronger alcohol.

The results of these experiments demonstrated: 1st. That the injuries of the liver heal in precisely the same manner as external wounds of the body heal. 2d. Hepatic abscesses are not produced from the gunshot wounds of the liver. 3d. Gunshot wounds of the liver do not produce any grave constitutional symptoms, and unless other vital parts are wounded, do not terminate fatally. 4th. The earliest time for healing of injuries of the capsule is five days, and of the true liver structure, fifteen days. 5th. The injection of simple irritating fluids into the substance of the liver produces similar results to those noted above."

As regards liver cells in hepatic abscess, he thinks they have been overlooked, on account of want of proper precautions in looking for them.

"I discovered that the liver cells were extremely pale, and so faintly visible that I was not surprised that I did not detect them at my previous examinations. With a high magnifying power I noticed semi-translucent bodies, frequently containing fat vesicles, and sometimes presenting a milky, faintly granular appearance. Occasionally a group of these translucent bodies were seen together. In no case could I discover these if I took a large drop of pus, so that everything was crowded by leucocytes and granular debris. In minute quantities, however, diluted with a drop of distilled water, the faint irregular bodies referred to became distinct enough to admit of observation. Upon careful study these bodies proved to be liver cells, which had lost their coloring matter from prolonged maceration in the serum. I have convinced myself of the above by scraping some pus from the wall of the abscess of the liver, obtained post-mortem, from this case, and here I could distinctly trace out the gradual transition between perfect liver cells and the faint, macerated-looking bodies which are found in the contents of the abscess, and which are direct derivations from the true liver cells. I regard the occurrence of fat drops in these bodies as a corroborative proof, as it is impossible for any other detached cell to contain fat drops of this character."

In conclusion, he says: "I am confident, from the examinations made by myself, and from the results of those reported by the above authorities, that a careful microscopical examination of the pus from true hepatic abscesses will, in every case, reveal liver cells, and with this fact proven we certainly have an invaluable diagnostic point in cases of hepatic abscesses."

Retained Placenta.

The following instructive case was presented by Dr. T. R. Trotter to the last meeting of the Mississippi State Medical Association:—

I was called to see Mrs. B., February 19th, and upon inquiry, obtained the following history: She was about six and a half months advanced in pregnancy, and had aborted about eight days prior to my visit. The midwife who attended her failed to remove the placenta, assuring the family that it would pass off without any trouble. I learned that she had complained of great distress in the back and hypogastric region, and had more or less fever; the family, however, were resting easy, under the delusion that everything would be right in a few days, and failed to appreciate, until the morning of my visit, the great danger to which she was exposed. Upon attempting to arise from her bed, she was taken with a terrible flooding; I was at once sent for, seven miles, and when I arrived found her very restless, pulse almost imperceptible, extremities cold, and the whole surface bathed in a cold, clammy perspiration, a continuous flow of blood from the vagina, eyes sunken, and the whole countenance denoting the greatest anxiety.

I gave her at once brandy, and had her rubbed with dry mustard, and gave her a large dose of ergot, and attempted to introduce my hand into the uterine cavity to remove the placenta; this I failed to do, on account of its contracted condition. I, however, succeeded in introducing the index finger, and proceeded, as cautiously as possible, to remove a portion of the placenta; the remainder I could not remove because the finger could not be passed around it. The flooding moderated at once, but she was pale as a corpse, and passed from one fainting spell into another for several hours; notwithstanding the frequent administration of brandy, chicken tea, etc. In eight or ten hours she was seized with a severe rigor, great thirst, restlessness, insomnia, and a small, rapid pulse, and complained of soreness and pain in the region of the womb and intense pain in the back, so much so that she could remain in one position but a few moments. I gave her enemas of laudanum for the restlessness and pain, and spirits of nitre and gelseminum for the febrile stage. As soon as the sweating stage set in, I gave quinine, iron and arom. sulph. acid; I continued this treatment about six days; after that I gave quinine, iron and nutritious diet. I used, from the beginning, flannels wrung out of hot water, vinegar and laudanum, alternated with hot turpentine stupes to her bowels, frequently injecting the vagina with a solution of chlorinated soda.

The discharges per vaginam were very offensive, her tongue was very dry and red, and great tympanites and dysuria; to relieve this condition, I gave her turpentine internally and used it externally over the bowels.

About the thirteenth day abscesses were observed about her ankles, which, after being opened, gave issue to very offensive purulent matter. About the sixteenth day she began to

show unmistakable signs of improvement, and in twenty days after my first visit, I considered her out of danger.

This was certainly a very unpromising case, the immense loss of blood, followed by the long continued putrid discharge, toxæmic fever, with its small, thready pulse, great prostration, tympanites, dysuria, and the putrid abscesses, presenting an array of complications sufficient to discourage the most sanguine.

I have reported this case to show what dire calamities ignorance or carelessness on the part of an accoucheur may bring upon an unsuspecting woman, and to impress upon the minds of the young members of the profession the great importance of seeing that every portion of the placenta is removed, and that the uterus is well contracted before leaving the patient.

I would not, however, advise any very prolonged or harsh measures to remove the placenta in cases of abortion prior to the fourth or fifth month, as by so doing the parts may be irritated and her suffering much increased. When the finger cannot be passed around the placenta, I always plug, if I am compelled to leave, and request the family to let me know should anything occur of an alarming character. In twelve to twenty-four hours I always return and remove the plug, and generally find the placenta and a few coagula of blood to come away with it.

The Speed of Thought.

The Boston *Journal of Chemistry* says:—

We have several times given the readers of the *Journal* a report of what has been done by scientists to determine the rate at which nervous influence is transmitted through the telegraphic system of our bodies. Some recent investigations on the subject are thus summed up in the *American Journal of Arts and Sciences*:—

Sensations are transmitted to the brain at a rapidity of about 180 ft. per second, or at one fifth the rate of sound; and this is nearly the same in all individuals.

The brain requires one-tenth of a second to transmit its orders to the nerves which preside over voluntary motion; but this amount varies much in different individuals, and in the same individual at different times, according to the disposition or condition at the time, and is more regular the more sustained the attention.

The time required to transmit an order to the muscles by the motor nerves is nearly the same as that required by the nerves of sensation to pass a sensation; moreover, it passes nearly one hundredth of a second before the muscles are put in motion.

The whole operation requires one and one-fourth to two-tenths of a second. Consequently, when we speak of an active, ardent mind, or of one that is slow, cold, or apathetic, it is not a mere figure of rhetoric, but an absolute and certain fact that such a distinction, with varying gradations, really exists.

The method by which these nerve motions are measured is thus described:—

If a cylinder divided into 360° be caused to rotate 1000 times in a second, it is evident that the passage of one of those degrees before a given point is equal to the 1,260,000th part of a second; this may be divided by a microscope, so that a period of time equaling the ten millionth, or even the one hundred millionth, part of a second may be measured. By this arrangement it is possible to measure the rate of nervous impulse. Suppose an electric shock be given to the arm; it produces a sensation and a contraction of the muscles; then, by noting the interval of time between the shock and the contraction, the time occupied by the action of the brain to produce the contraction, however quick, will be ascertained. By trying this experiment on various parts of the body, the amount of sensibility of the different leading muscles may be determined.

A Difficult Forceps Case.

Dr. John T. Dillon reports the following case in the *British Medical Journal*:—

On May 10th, 1882, at about 10.30 P.M., I was summoned to assist another physician in a midwifery case. The patient, a strong, muscular, well developed country woman, aged 33, was now ill forty-eight hours, in her sixth confinement. All her previous labors were of a most difficult nature, none of her children being born alive; delivery being effected in some cases by forceps and in others by the perforator. The os was fully dilated and the head presenting in the brim of the pelvis, in the first oblique diameter. The waters had been discharged more than twelve hours. There was slight narrowing of the antero posterior diameter. The pains had ceased for some hours, in spite of the use of ergot. There was no constitutional disturbance. Forceps were applied, and after an hour's work the head was delivered, the appearance of which indicated the death of the child. The body could not be extracted. We were about opening the thorax, and eviscerating, when we had recourse to the following novel procedure. We procured about two yards of the ordinary diaper, and this we twisted into a long, narrow fold; and having made a loop, we encircled the child's neck in it. One of us then proceeded to pull on the ends of the fold, while the other, with his hands on the child's head, assisted in the extraction. In a few seconds the body of a large, well nourished child was born. The placenta was pressed out; there was no hemorrhage, and the woman made a rapid recovery. The cord was of the ordinary length and was perfectly normal from the placenta to within five inches of its termination in the umbilicus; here it broke up into a large, spongy mass, closely resembling placental structure. This mass was about the size of a large orange, and from it proceeded, to the navel, something less than one inch of cord, of the ordinary size and appearance. The placenta was normal in every respect.

Abuse of Injections of Morphia.

The *Medical Times and Gazette* says:—

At the first Athens Medical Congress (*Gaz. Méd. d' Orient*, July), Dr. Zambaco terminated a paper upon this subject with these resolutions:—1. Although the subcutaneous injection of

morphia is so precious a means for the relief of pain of all descriptions, patients often contract a habit of using it which it is almost impossible to break through, continuing to employ it after the reason for its use has passed away, and progressively increasing the dose, and inducing a slow poisoning, which acts on nutrition and on the intellectual faculties. 2. Practitioners should prescribe these injections with much precaution, and should not allow the patients to practice them themselves, in order to prevent them contracting the fatal habit. 3. On account of the dangerous effects of their prolonged employment, they should not be used in chronic disease of the heart, in cerebral affections, or in any disease accompanied by debility in general, and especially that of the nervous system. In such cases we may obtain ease advantageously by the hypodermic use of sulphuric ether. 4. The general enthusiasm which at one time gained hold of the profession for these injections has, in face of the calamities that have resulted from their employment, diminished. 5. Although opium acts by its alkaloids, and especially morphia, yet it and its extracts are often preferable to morphia, and it has been an error to so generally displace it. After other speakers had expressed themselves in the same sense, Dr. Galvani said he considered that their observations savored somewhat of exaggeration, and that it would be doing a great injury to medical art to discredit the proper use of these injections, which, like any other remedy, may be abused. Morphinism is especially observed in the great centres of civilization, wherein many have their nervous systems in a condition predisposed for its production. Morphia always requires to be administered with caution, and in relation to the idiosyncrasies of the recipients.

On a Peculiar Reducing Substance in the Urine, from the Internal Employment of Turpentine.

The *Med. Times and Gaz.* says: From the researches of M. Vetlesen, in the Physiological Institute of Christiana, published in the *Nordiskt Medicinskt Arkiv*, for 1882, it appears that during the internal employment of turpentine, the urine contains a rather large quantity of a reducing substance, which, in its reactions (such as blackening, on boiling, an alkaline solution of oxide of bismuth, and reducing the peroxide of copper to the suboxide), seems to be composed in great part of a matter strongly resembling grape-sugar, without, however, being in any way identical with it. The author, in fact, has never succeeded with the polarizing apparatus in observing the rotation to the right side. The reaction disappears after fermentation, which process appears to act more slowly. Experiments subsequently showed that a small quantity of hydrochloric acid destroyed this reducing substance, even at a relatively low temperature, while under the same circumstances it was proved that grape-sugar is only slightly destroyed. The reducing substance described by M. Vetlesen is, in all probability, optically indifferent; it disappears by fermentation with rather more difficulty than grape-sugar; but as it does so when the urine is simply left to rest for about five days, it might perhaps be supposed that it is not a fermentable body. But M. Otto has traced in one experiment, and after fermentation, some alcohol in the distilled product, while before fermentation the urine gave only a negative result. It may be admitted, as the result of the experiment, that the substance appearing in the urine during the internal use of turpentine is a kind of fermentable sugar, the nature of which, however, is not yet specially determined. The researches made appear to show that the quantity of this reducing substance is in relation to the amount of the dose of turpentine, and that it diminishes if the use of this drug be continued for a certain time.

Excision of Superior Maxillary and Inferior Dental Nerves, for Neuralgia.

In the Pittsburgh *Medical Journal*, Dr. Wm. Wallace says: "The fact that a new connecting medium sufficient to enable a nerve to perform its functions can be developed to the extent of an inch or more has been sufficiently attested. Any resection, therefore, which would embrace a less portion of nerve would in all probability be of only temporary benefit, unless the period of relief gained thereby would permit of such constitutional recuperation as would withstand any future attacks.

"My experience in the operation of resection for neuralgia has been extremely limited, but the success attending my efforts has been so satisfactory that I venture to offer it as an inducement for a more extended application of this method of relief."

A severe case of neuralgia coming under his care, it was decided to resect a portion of the inferior dental nerve. The disc of bone removed by the trephine failed to expose the nerve, and the patient bearing ether badly, it was decided to postpone further operative interference. Subsequently, both the superior maxillary and inferior dental nerves were excised.

The continuance of the pain for a few days after the operations and its return for a short time, seven months later, cannot well be accounted for. The clinical features of the case embraced all of the symptoms described by Trousseau as characteristic of epileptiform neuralgia, which he believed to be an expression of true epilepsy, a view scarcely confirmed by the history narrated. Entire and permanent immunity from pain, return of appetite, ability to take solid food and comfortable sleep, were secured by the operations.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The "Transactions" of the Mississippi State Medical Association for its last meeting are very interesting. There are many short articles of much practical value, and the whole is well worth reading.

——An interesting history of the psycho-physical training of an idiotic child is narrated by Dr C. H. S. Davis, of Meriden, Conn., in a reprint from the New England *Medical Monthly*.

——We have received the "Transactions of the State Medical Society, of Arkansas," at its Seventh Annual Session. It contains many good articles, and evidences zealous interest on the part of the profession of the State.

——"The Sixth Annual Report of the State Board of Health, of Wisconsin" (1881), contains a deal of valuable reading. The various articles on hygiene show the increasing interest that is being taken in this science in our country, and many of the articles are of immense practical value.

——Messrs. Lindsay & Blakiston's "Physicians' Visiting List" for 1883 has appeared, in its customary make-up, to which are added the metric system, posological and toxical tables. As this list has been familiar to physicians for thirty years, and always popular, we need not reiterate our often expressed opinion of its merits.

——A valuable point in practice is set forth by Dr. Charles Turnbull, in a reprint from the *Transactions* of the Penna. State Medical Society, entitled "Powdered Boracic Acid in the Treatment of Chronic Purulent Inflammation of the Middle Ear." Copies of it may be had from the author, 1702 Chestnut St., Philadelphia, and it will repay every practitioner to peruse it.

——The importance of "Subjective Traumatism of the Eye" is presented by Dr. W. S. Little, of this city, in a recent reprint. By "Subjective Traumatism," he means the diminution of sight, and diseased condition of the tissues of the organ, resulting from optical defects or ametropia. A number of cases are detailed, with useful suggestions for treatment.

——In a reprint from the Gynecological Society *Transactions*, Dr. W. R. Gillette urges the value of digital assistance during the first stage of labor. He believes that he can, by so doing, dispense with ergot altogether and reduce the use of the forceps very materially. The procedure is very simple. An anæsthetic is administered to the obstetrical degree, that is, just to the extent of dulling the pains; then, *during uterine contraction*, he introduces two fingers into the os and expands them; or by hooking the forefinger on to the cervix, makes firm pressure, occasionally sweeping the finger around the whole cervical orbit. This is done *during the pain and without any violence.*

BOOK NOTICES.

Medical Electricity. A Practical Treatise on the Application of Electricity to Medicine and Surgery. By Roberts Bartholow, A.M., M.D., etc. Second edition, enlarged, with 109 illustrations. Philadelphia: H. C. Lea's Son & Co. 1882. Cloth, pp. 286.

It is safe to say that in the minds of most physicians there is a certain degree of haziness about the use of electricity in medicine. They probably own a battery, and if they have had it two years, it is probably out of order; they can recall some cases where this mysterious agent seemed to work wonders, and a good many more where it utterly failed. Why it did either, they don't know.

Yet there is no doubt but that its therapeutic use is increasing. This work of Dr. Bartholow's will, therefore, be welcome to many. It is fortunately not such an interminable treatise as most electro-therapeutists like to write. It is not burdened with a needlessly learned terminology, and is written more from the point of view of the physician than the specialist. The second edition has been considerably increased over the first, and has been brought up to the most recent advances of the science. It can in every way be recommended to those who wish to read a lucid, manageable monograph on this form of therapeutics.

On Slight Ailments; their Nature and Treatment. By Lionel S. Beale, M.B., F.R.S. Second edition, enlarged and illustrated. Philadelphia: P. Blakiston, Son & Co., 1882. Cloth, 8vo, pp. 283. Price $1.25.

Obsta principiis is a very wise old maxim in medicine, and Dr. Beale has done an acceptable service in calling the attention of the profession to the often underrated importance of the slighter forms of disease. Let these be neglected, and they often lead to the most serious results; let them be promptly and intelligently attended to, and many a person of feeble constitution will survive to old age in comparative comfort. Dr. Beale discusses such topics as nausea, indigestion, constipation, diarrhœa, worms, vertigo, biliousness, neuralgia, and the common forms of slight inflammation. His suggestions are eminently judicious, and though what he says may be familiar to all members of the profession, their application of the knowledge cannot but be improved by a perusal of his words.

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THE PROBLEM OF MEDICAL EDUCATION.

A recent issue of the *Lancet*, commenting on the questions involved in medical reform, says: "In plain terms, the history of medical reform in the last fourteen years has been a history of failure; a history of nineteen bodies out of sympathy with the profession, several of which are superfluous, striving to perpetuate themselves and all their individual privileges, without reference to public advantage and the question of justice to those on whom exacting examinations and fees are required."

Thus has the cry ever arisen, of imperfections in medical education, and thus, we are inclined to think, will we continue to hear such wailings, to the end of time. No profession, no human institution, nothing in this sphere is perfect, and without absolute perfection there will ever be room for fault-finding.

The more intelligent public, as well as the better class of physicians, have always been ready to recognize the shortcomings in medical education, and to leave no effort untried to remedy them.

But there is one point little touched upon, and against which legislation can have no influence, namely, the post-graduate education of the physician.

We have in our own country several institutions of medical instruction in which the course of medical training is very satisfactory; not, indeed, all that idealism would require, but still very excellent, and good enough, were it supplemented by the practices of which we are about to speak.

It would be unreasonable to consider a young man just out of a medical college, or but just licensed by an examining board, as a *physician*, in the comprehensive sense of the word.

True, he has received the legal right to practice the healing art, and his possession of a certificate from a recognized institution or a legally constituted body is proof presumptive of his theoretical mastery of the science. But does this make him a physician? Not at all.

He may, and indeed must (if he emerges from one of the institutions we have referred to), have had some practical acquaintance with the clinical aspects of his profession; but this has been so comparatively limited, his time has been so much occupied in laying the solid foundation, that it does not count for much.

In truth, when a young man graduates in medicine he is just ready to commence the serious study of the science; all his college labor has been but a preparation for the real intellectual work that succeeds it.

This labor cannot be controlled by legislation, but is always under the direct influence of inclination or circumstances.

In our country the young men who choose medicine for a profession are, as a rule, strange as it may seem, very deficient in worldly wealth, hence they are compelled to turn their diplomas into practical value as soon as possible.

Among the more favored class, who possess an abundance of pecuniary comfort, disinclination for study is an American characteristic, but it is from among the few sensible and appreciative

ones of this latter class that the leaders of our profession are formed.

A significant fact in this connection is, that in England as well as in our own country, the most learned and scientific physicians have not always been the *best* college students (indeed, in many instances, the case has been just the reverse), thus conclusively demonstrating that the preliminary education is not the all important element of subsequent proficiency.

It is too utopian to hope for perfection in any course of teaching where there is inter-dependence of teacher and taught, and it is practically impossible to *entirely* do away with this condition, since the dependence of one on another, in all walks of life, is the necessary foundation of social existence.

The State may subsidize, but influences and personal considerations will be potent all the same. To a certain extent, selfish motives may be debarred from the regulations for preliminary medical as well as any other education, but its entire eradication, we fear, is an impossibility.

We have certain standard text-books on all the varied branches pertaining to our comprehensive science.

All of our best institutions furnish facilities for bedside instruction and for practical laboratory work.

When a thorough study of the first, and a faithful attendance upon the second is enforced and supplemented by a rigid examination, all that can be done has been done.

Still the successful student is not yet a physician.

Moral suasion is now the all powerful lever that must be called into action to carry on that which has but just been commenced.

The teacher must constantly impress upon his students the all important fact that constant and unremitting study is absolutely necessary if they desire to be physicians in fact and not merely in name. Each member of our profession must ever remember that our science is not like arithmetic, in which certain rules, once committed to memory, will forever remain and serve every purpose.

They must realize that our profession is a progressive and changing one, that not a single day passes in which some new contribution is not made to our voluminous knowledge, and so realizing, they must feel the necessity for constant study.

Again, after we leave the few fundamental principles taught by anatomy, physiology, and pathology, we must remember that ours is not a science of absolute facts, but rather one of broad generalities, and that, therefore, the physician must, preëminently, be a man who cultivates the two faculties of observation and reasoning to their fullest possible extent.

Can any legislation force a man to so regard his post-graduate life? We fear not.

It would therefore seem that the true solution of the problem of "Higher Medical Education" is to be found, *not so much* in legal enactments or other provisions for elevating the requirements of medical schools or licensing boards (though these are all admirable, as far as they go, and form an important part of the whole), as in advice, constant, never ceasing advice, to students and graduates, to persistently and intelligently study throughout life. To build upon the ante-graduate foundation a post-graduate superstructure of broad observation and reasoning, of reading and reflection, that alone can form a temple grand enough to become the abiding place of a *true* physician.

How to erect this structure of post-graduate life should form a more important part, than it now does, of the teachings of our medical instructors.

The post-graduate courses of our best institutions afford certain facilities to those desirous of pursuing their preliminary studies, but these only go to a certain extent, and have an ending, while the student life of a true physician should terminate only with his death; and such a life must be a voluntary one; no force can compel it; advice only can demonstrate its value, and thus secure it accomplishment.

The Louisville *Medical News*, speaking of the late Dr. George B. Winston, of St. Louis, tells us that a friend once remarked to

him, "Doctor, what necessity is there for this ceaseless labor and study at your time of life?" With a look of astonishment never to be forgotten, he replied, "My dear sir, I am under bonds to do it. When I offered my professional services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which human flesh is heir; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God will hold me responsible for the loss, through inexcusable ignorance, of a precious human life, and punish me accordingly; and whenever I get my consent to be content with present professional attainments, and trust my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations which, with my best endeavors to meet them honestly and conscientiously, still sometimes is almost heavier than I can bear."

Dr. Winston's life and example will do more, if conscientiously followed, to solve for us the vexed problem of "Higher Medical Education," than many treatises and much legislation can possibly hope to accomplish.

PROFESSIONAL ETIQUTTE.

We fear this is one of the lost arts among many of our profession. What it means, what are its mandates, what it obliges us to do, no one can plead ignorance of, simply because every decent and respectable man has within his innermost self that little monitor constantly advising him to do unto others as he would that they should do unto him. This, after all, is the foundation of etiquette and of justice in every profession and in every walk of life. There are some men whose moral sense seems so little developed that they fail to realize when they transgress this golden rule, and for such, one can but have pity, and charitably say, forgive them, for they know not what they do. But the majority of our profession have sufficient intelligence, education and innate refinement to cause them to thoroughly appreciate their own littleness and meanness when they degrade themselves to try and secure their own preferment by belittling those whom they feel are too noble and too much above their dirty level to meet them with their own soiled weapons. Feeling this, many conscienceless men are ever ready to aggressively and remorselessly assail others, and to, so to speak, stab them in the dark, trusting that they will never recognize their supposed disguised and ought to be despised assailants.

There is another class of professional parasites, who, while they do not desire to injure their brethren, yet are so constituted, and possess such a small mental calibre, that they cannot resist the temptation to, vulture-like, pounce down upon any imagined weakness or failing in their confrères, and by distorting and magnifying it into gigantic proportions, hope to raise themselves by the supposed thrust downward they have given to some worthy and innocent man. There are so many open questions in medicine, and so many important questions upon which men of equally great eminence entertain directly divergent views, that it is not difficult for one so disposed to criticise almost any statement that may be made or any action that may be performed, and to cite good authority to support his criticism, lacking, the while, the candor or honesty to admit that he whom he criticises can produce equally strong authority for his statements. Such miserably mean men always come to grief in the long run, for be it said, to the credit of human nature, man, on the whole, realizes that honesty is the best policy; and though water for a time may be forced up grade, yet when left to itself it must, according to nature's inevitable laws, seek its level; so these men are ultimately detected in their nefarious attempts at self advancement, and are forced, by public and private opinion, to occupy that low level to which all kinds of dregs, animal and vegetable, naturally belong.

So, then, it is pleasing to the honesty of every right-minded man when such despicable men, (for we can call them by no more gentle name)

are exposed. Such has been recently done in England, in the case of two professional backbiters. In the one case a surgeon was engaged to attend a case of compound fracture. When the man was discharged, cured, the physician presented a bill for sixty dollars. Instead of paying it, the patient, *acting under the advice of another physician*, instituted a suit for damages, on the ground of malpractice, basing his claim on "forgetfulness or ignorance of all the rules of art, and in particular on the employment of perchloride of iron to arrest hemorrhage." A committee of experts, composed of medical men, appointed by the court, concluded in favor of the surgeon; the man offered to pay the bill and withdraw his suit; to this the surgeon objected, when it was ruled by the court that the man should pay the original bill, all costs and one hundred dollars damages to the surgeon. In the second case both plaintiff and defendant were medical men. An illiterate man was sent to a certain city, with a card from a doctor in a neighboring town, recommending him to the care of Dr. A. An omnibus driver, by mistake, took him to the house of Dr. B, who kept both card and patient. Dr. A heard of the occurrence, and meeting Dr. B on the street, upbraided him with his unprofessional conduct, and called him offensive names. B, seeing that his position was compromised, summoned A before the courts, where the tables were entirely turned; B, was condemned to pay A $1000, damages, and an appeal resulted in a confirmation of the judgment.

Such cases should delight every honest man and every reputable practitioner should constitute himself a detective to bring to the bar of justice and purge from the list and companionship of respectable physicians, all who endeavor to advance themselves by libeling honest and capable members of our profession.

It is hard enough for a man to succeed in this world of struggling, even though he receives fair treatment from all, but when the miserable backbiter comes in to injure him his lot is truly deplorable. So then let us have done with unseemly contention in our great profession.

SPURIOUS MEDICAL JOURNALS.

It is common to deplore the fact of the increase of medical colleges and journals in this country. As for the colleges, we expressed ourselves about them recently, and share in the general regret at the formation of so many hurtful institutions.

With journals it is in a measure the same. Pliny is recorded as having said that no book was so utterly weak that he could not learn something useful from it. It would puzzle him, now-a-days, to get anything worth knowing from a good many works which see the light. But it may fairly be said that in scientific literature his remark holds good. Only there the difficulty comes in—and it is a very grave one—to distinguish between what is said for the good of science, and what for the good of self under the mask of science.

There are two classes of medical journals which ought to be weeded out. They are Canada thistles on the soil of professional culture; noxious plants, actively injurious, both by occupying the place of something better, and disseminating poison instead of food.

One of these is the class which sells itself, which levies blackmail, which publishes articles professedly scientific, but secretly intended to cry up or cry down this remedy or that man, this mode of cure or that institution. Does any one say that this species of vermin does not exist among us? To such flattering optimist we answer that within this year we have had submitted to us indisputable legal evidence, where a physician of some general repute and a medical journal that claims a high position had deliberately sold out their pen and pages for a sum of money. They had actually made overtures to both sides and took the highest bidder! This we know, and there are other instances which, as the boys say, we should like to bet on.

All will agree that this species of journals is as noxious a breed as tree worms in autumn, and deserves to be stamped out with as little remorse. About the next class we may not obtain so unanimous a verdict.

These are the journals published as advertising

mediums by drug manufacturers. By the very nature of these periodicals, they cannot be honest. They might be, indeed, if they pretended to be nothing more than what they are, to wit, a tradesman's announcement. But with this they are not content. They assume a learned title, and pretend to be scientific sheets. Of course, they contain a good deal in favor of the drugs they are intended to advertise, and nothing against them. Reports of successful cases attributable to these remedies are eagerly printed, but reports of another color are not wanted. Various arts are used to blind the reader as to their real purpose, and the journal is offered at a very low price, or often given away.

We do not have to go outside of Philadelphia for examples of these spurious, pseudo-scientific sheets. As they are essentially, and by the condition of their existence, one-sided and deceptive, we believe them to be an actual injury to the professional reader. We would warn him that when he sees a lot of letters and statements advocating a drug or preparation, he may be sure that he has in his hands a journal which is merely a trader's advertisement, no matter how it is named. If he doubts it, let him write an adverse criticism on the drug in question, and see if his lines are admitted.

To our mind it would be better if the profession itself drew an authoritative distinction between medical journals which are such, and those which only pretend to the name.

Notes and Comments.

Destruction of Trichinæ.

The *Med. Times and Gaz.* says that M. Fourment's experiments conclusively prove that salting of meats cannot be regarded as a safeguard against trichinosis. He succeeded in producing trichinæ in mice fed upon salted meat that had been again imbedded in fine salt and hermetically sealed for fifteen months. Trichinæ may die in salted meats as well as anywhere else, hence some experimenters have claimed a destructive action for the salt. But the parasites may also live a considerable time without our being able to determine the length of the period after which death necessarily follows latent life. It is also pointed out that when the trichinæ penetrate the muscles, they are perfectly free, and have no covering whatever to protect them, and a month or more elapses before they accept the situation, and coil themselves up to quietly await their chance of being eaten up by some other animal, which must occur before they can possibly develop into the perfect adult condition. But it is only at the end of three months that a fibrous cyst begins to form around them, and it is perhaps a year before the covering is sufficiently dense and impermeable to entirely protect it from the action of salt. The principal safeguard against trichinosis must still be looked for in perfect cooking. In no single case, and numerous experiments have been made, has heat failed to entirely destroy these parasites; and only those who neglect the precaution of thorough cooking (absolutely necessary in the case of all pig-meat and sausages), need be under any fear of their introduction into the system.

Psychosis and Uræmia.

That sometimes severe *psychic* disturbances take place during or following a *uræmic* attack has more than once been alluded to. We are told of a very interesting case, in the *Deutsche Medizinal-Zeitung* of August 3d, 1882, which happened in the large Charité Hospital of Berlin. The case is described in full by Dr. L. Brieger, in the annals of that hospital for 1882.

A man 54 years old, who had for a long time suffered from a kidney disease, was suddenly seized with a number of uræmic attacks. One of them was especially severe and was followed by coma and stertor, lasting twenty-four hours. The urine, which during this state was withdrawn by the catheter, had a dark-red color and was almost stiff, from the presence of a large amount of albumen. Hitherto the urine had shown at times only, and then sparingly, albumen. When the patient at last awoke from his coma he appeared confused. Very soon a state of intense excitement set in, followed by wild hallucinations, which continued uninterruptedly for eighteen hours. Consciousness then gradually returned and reason resumed its sway, but the memory during the time of the attack, and for everything that happened in it, was totally extinguished. During the next four days a plain and well-expressed aphasia could be noted. The presence of the albumen continued in the high degree for a short time still, then it gradually returned to its former moderate percentage.

The patient had a few more light spasmodic attacks, and then became convalescent in so far, as without further symptoms only a mild albuminuria affected him, so that he could be discharged from the hospital.

Subinvolution of the Uterus.

Dr. John Williams delivered an address on this subject before the Section of Obstetric Medicine, at the recent meeting of the British Medical Association (*British Medical Journal*), in which he said that the causes of subinvolution are, general debility; multiparity at an advanced age; post-partum hemorrhage; retention of portions of placenta and membranes; lacerations of the perineum; and pelvic inflammations. Its results are hemorrhage, dysmenorrhœa and prolapsus. Some of these causes, as post-partum hemorrhage, perineal laceration, pelvic inflammation, retention of portions of placenta and membranes, can in a great degree be prevented. Wounds of the perineum should be immediately and completely closed. It is very important to remove the discharges from uterus and vagina, to be effected by abundant hot vaginal injections (three or four pints; temperature 110°–115°) commenced immediately after delivery and repeated twice a day at least. They should contain a disinfectant.

The Action of Hyoscin on the Insane.

In the *Charité Annalen*, of Berlin, 1882, we find the result of very numerous observations which were made by Dr. R. Gnauck, in regard to the effect of *hyoscin* on the insane, of which we made mention in a late number of this journal. G. made use, in these experiments, of the hydro-iodide of hyoscin. He employed it subcutaneously, in the doses of 0.0005 (about $\frac{1}{120}$ grain)–0.0015, or internally in a dose $\frac{2}{3}$ to 1 time as large. The highest subcutaneous dose he ever administered was 0.002, about $\frac{1}{30}$ grain, by which we can see how powerful the remedy is. The results were as follows. Hyoscin has no specific effect whatever on any form of disease of the insane. It causes sleep and removes restlessness, but by no means better than the other known remedies. Toxic side effects (general malaise, headache, vertigo, debility, feeling of being paralyzed, nausea, loss of appetite, etc)., indicate special caution, as the individual sensitiveness to the influence of hyoscin is a very varying one. Generally it is not well received; especially, however, harmful in dementia paralytica and in delirium tremens. An anodyne effect G. had never occasion to note. It can, therefore, perhaps, only be indicated when the other hypnotics seem to have no effect; but in general it cannot be recommended. We draw the attention of our readers who may feel inclined to experiment with this powerful remedy, once more to the fact that it is, perhaps, the most dangerous of all our drugs which have ever been used internally, as the one-hundredth grain of hyoscin has been known to almost cause death. Morphia and stimulation would be the proper antidotes.

Coffee and its Effects.

Dr. P. A. Wilhite read a paper with this title before the last meeting of the South Carolina Medical Association (*Transactions*) in which, after reciting the usual poisonous properties of coffee, he claims that it is more injurious than is generally supposed by the laity or admitted by the profession. He believes that strong coffee, when used to excess, will at least promote, if not cause gout; and its continued use seriously impair the blood, irritate the kidneys, congest the liver, derange the nervous system, and paralyze the digestive functions in all their actions, causing acidity, heartburn, tremor, debility, irritability, dejection of spirits, etc. His attention was directed in an especial manner to these poisonous properties during the late war, when women for whom he had frequently prescribed for a complication of nervous troubles, being unable to procure coffee, became comparatively strong and healthy before the close of the war. He considers that is not so much the quantity taken, as the peculiar susceptibility of some persons to its influence.

A Proposed Substitute for Carbolic Spray.

Dr. A. W. Mayo Robson read a paper on this subject in the Section of Surgery, at the recent meeting of the British Medical Association (*British Medical Journal*). He pointed out the dangers and bad results of the irritating effects of the carbolic spray, and then described his substitute, which he has used in many cases with excellent results. Air is first passed through a cylinder containing cotton-wool, which Pasteur has proved to be sufficient to free it from germs; but as this would only be a pure and not an antiseptic air, it is then passed through two cylinders containing pumice-stone, over which about an ounce of eucalyptol has been poured. Thus it emerges as a pure air,

loaded with invisible particles of an antiseptic, which seems to be capable of destroying any vestiges of germ-life which may have been drawn in from the surrounding atmosphere; it is directed over the desired spot by means of five coralline nozzles, which act on a ball and socket-joint, capable of being fixed in a certain direction by a screw. If in an institution, such as a large hospital, the hydraulic bellows used to work the organ, or the water power used for the lift, can be made available, it would be an easy matter to have a pipe to each ward and to the operating room, which would convey the desired current, ready to be attached to the machine whenever it might be wanted.

Caput Obstipum.

The *Obstetric Gazette* says that Prof. Albert, of Vienna, recently exhibited a child with this affection. The head is inclined to the left; that is, the lateral plane is abnormally near the left shoulder. This condition is usually congenital, and is due generally to peculiarities of the position of the fœtus in utero, allowing contraction of the sterno-cleido-mastoid muscle. In breech presentations and difficult forceps delivery, a laceration of this muscle may occur, with consecutive inflammation and contraction. A mere restitution of the head is of no use; the shortening of the muscles must be counteracted by subcutaneous division, followed by orthopedic treatment.

During the first four or five days the patient must lie upon a hard bed, with the head in a horizontal position. When the soreness has passed away put on the Dieffenbach cravat, which is so firm and high on the affected side as to prevent a return to the faulty position. Acquired caput obstipum may be spastic or paralytic, or the result of cicatricial tissue building, or originate in changes in the spinal column.

Milk Powder in Gastric Affections.

The *Medical Times and Gazette* says that Dr. Debove, in a communication to the Paris Hospital Medical Society (*Gaz. Hebdomadaire*, August 25), observes that the milk regimen, which is so indispensable in affections of the stomach, and especially simple ulcer, speedily becomes so disgusting to these patients that it has to be left off. This serious inconvenience, however, may be remedied by the employment of the œsophageal tube now used for feeding phthisical patients. But by this only a litre of milk can be introduced at a time, so that it would require to be employed six times in order to introduce the six litres, which is the mean quantity required for the subjects of *ulcus rotundum*. To avoid this frequent introduction of the tube, Dr. Debove has had skimmed milk evaporated (cream being but slightly digestible), and the residue reduced to a fine powder. If this be dissolved in warm hot water, two or three litres of milk may be injected in the same volume as a single litre. It is possible that this milk-powder, which furnishes excellent results in gastric affections, may also prove very useful in Bright's disease, cardiac affections, and all cases in which a milk regimen is employed. About a litre of pure milk is represented by 4 ounces of the powder. Dr. Dujardin-Beaumetz observed that in feeding the subjects of phthisis with the tube he has obtained excellent results from a mixture of powder of meat, powder of blood, and powder of milk. As powder of blood is not very digestible, he only adds a small proportion of that as a ferruginous principle.

Sudamina in Typhoid.

M. Albert Robin has found, according to the *Lancet*, that the liquid of typhoid sudamina contains a number of fine globules of fat and some epidermic cells. It contained neither albumen nor sugar, and was not rendered opaque by the addition of alcohol. No uric acid could be discovered in it by the murexide test. An analysis showed that it contained a considerable quantity of chlorides, but no trace of sulphates or phosphates; the proportion of water was 982, of solid matter 18, per 1000; the solids consisting of 14 parts of organic and 4 of inorganic substances. Hence the amount of organic material eliminated by the perspiration in typhoid must be regarded as considerable.

Hyaline Degeneration.

The *Lancet* says that, in *Virchow's Archiv.*, Dr. Max Vallatt describes the process of hyaline or fibrinous degeneration of tubercular formations. In tubercles it is best observed in those which occur in the spleen, lymphatic glands and liver, and is to be regarded as an early stage of caseous degeneration. He concludes that it is formed from the reticulum of the peripheral zone of the tubercles, and also from the trabecular tissue of the spleen and lymphatic glands, the bands becoming thickened, homogeneous and glistening, while the spaces between the original

fibres become converted into narrow channels, in which only the nuclei of the cells that formerly existed there remain. In the tubercle it also replaces the epithelioid and giant cells, the former appearing to be converted into homogeneous non-nucleated masses. The precise share taken by the giant cells in the formation is unknown. The channels left between the degenerated and swollen bands allow of the passage of fluid and pigment particles into the interior of the tubercle. In caseating the material breaks up into a finely granular mass, and is often found to be beset with nuclei, either the relics of previously existing cells or immigrants from surrounding vessels.

Dreams.

The *British Med. Jour.* records some interesting experiments on this subject that have been made by M. G. Delaunay. According to psychologists, dreams are generally illogical and absurd. M. Delaunay, however, by covering his forehead with a layer of cotton wool, rendered at will his dreams healthy and intelligent. According to his experience, the dreams which people have when lying on their back are sensuous, agitated and erotic. Those which occur when the dreamer is lying on the right side are changeable, full of exaggeration, absurd, and relate to old recollections. Those which occur when lying on the left side are intelligent, reasonable and relate to recent occurrences. People often talk during the last mentioned dreams. The author considers that dreams, intelligent or otherwise, erotic or sober, can be induced by causing variations in the cerebral circulation and the nutrition of the various regions of the brain, either by the elevation of the cranial temperature or by decubitus. They, therefore, form an interesting field for psychological research.

Tuberculosis of the Tongue.

The *Lancet* says that Dr. Thomayer, of Prague, describes three cases. In one case a wide fissure existed, about the middle of the dorsum, with yellow-coated base, and prominent, coarse tubercular nodules at its margins. In the second, the ulcer occupied the right half of the tip of the tongue, and in the third it was situated on the frænum. Two of these cases died, and microscopical examination was made. The ulceration had destroyed the mucous membrane and sub-mucous tissue, and the base was formed by a thick layer of small, round cells, intersected here and there by muscular bundles. Beneath this there spread into the inter-muscular spaces masses of similar cells, which were found to consist partly of giant cells and to be separated by the delicate stroma of tubercle. The muscular fibres themselves seemed invaded by the cell growth. The extent of the lesion demonstrates the futility of caustics, and points to excision as the proper treatment.

Treatment of Eclampsia.

Dr. C. Breuss (*Arch. f. Gyn.* xix, p. 218), recommends, for the cure of eclampsia, a strong diaphoresis, produced by hot baths followed by wrapping up in flannels. He has made use of the same, not only during the delivery, but also during the last months of pregnancy, and with success. Pregnancy was in no case interrupted by it, but œdema and albumen in the urine disappeared totally. The baths were kept at a temperature of 40–45° C. The duration of the bath was half an hour; the patients were kept wrapped up in blankets after the baths for two to three hours. The same cure was also employed in hydropic pregnant women affected with albuminuria; and here also the result was such a favorable one, without ever interrupting the normal progress of pregnancy, that we may well recommend future trials of the same.

Aconite.

The *British Medical Journal* says that Mr. E. M. Holmes has drawn the attention of the Pharmaceutical Conference (*Pharm. Jour. and Trans.*,) to the want of uniformity in the root sold as aconite. Many species, or varieties, of the root are current in commerce. Since aconite is now being largely used, internally, in the treatment of inflammatory affections of the lungs, fevers, and other acute cases, it has become extremely important that so powerful an agent should receive far more attention at the hands of the pharmacist than it has hitherto received. We are glad to see that attention has been drawn, by so excellent an authority, to this subject.

Mental Activity and Tissue Metamorphosis.

The London *Medical Record*, quoting from *Archiv. für Pathol. und Pharm.*, says that, after numerous experiments on himself and others, Spick concludes that mental work does not to any perceptible degree affect the metamorphosis of the tissues of the body. The total

quantity of the urine is not altered, nor are the urea, uric acids, chlorides, or sulphates increased or diminished. Contrary to expectation, there is not the slightest increase in the excreted phosphates. The proportion also of oxygen, nitrogen, and carbonic acid in the respired air, is much the same as when the brain is not actively engaged. The molecular changes which occur in the brain during its activity are, therefore, either not oxidation-processes, or, if so, are so little in amount as to escape detection by the methods of investigation employed.

Placenta Prævia.

Dr. John Reid reports a case of placenta prævia, in the *British Medical Journal*, which terminated rather differently from what is generally supposed to be the rule. Having intentionally lacerated the placenta to some extent, with the result of but covering his fingers with blood, he ruptured the membranes, when only some blood-streaked liquor amnii escaped. Within three hours the labor terminated naturally. The placenta was soon expelled, but the uterus still felt like a large, doughy mass; but soon after the expulsion of about a pint of blood, firm contraction of the uterus resulted, and the case progressed favorably. This is one of the many cases which militate against Simpson's theory of hemorrhage in placenta prævia, and may also add some additional force to the objections against meddlesome midwifery.

Salicylic Acid in Typhoid Fever.

M. Vulpian, according to the *British Medical Journal*, has had great success with the internal use of salicylic acid in typhoid fever. He gives as much as a drachm and a half a day, in doses of four to five grains every half hour. He does not claim that it shortens the duration or lessens the mortality of the disease; but that it reduces the temperature. Of all patients treated, those who were given the acid improved most rapidly. By interrupting the treatment, M. Vulpian ascertained that the salicylic acid was really the cause of the lowering of temperature.

Bismuth in Dyspepsia of Children.

In *The Practitioner*, Dr. E. W. Dunbar, of Zurich, says that, for loss of appetite, in children, with pain after eating, nausea and depression, if accompanied by a tongue either clean or slightly coated, but showing redness and enlargement of the papillæ fungiformes, bismuth is very good. He gives it either in the form of subnitrate, in doses of one-half grain up to two, three and five grains, or the solution of the oxide in ammonia and citric acid, in doses of from two minims under one year to three, five, ten, fifteen and twenty minims, up to twelve years of age; the dose to be repeated twice, or four times a day, according to the severity of the symptoms. Bismuth is quite ineffectual in the dyspepsia of children, when the tongue is smooth, clean, and shows no enlargement or redness of the papillæ fungiformes.

Ferruginous Livers.

The interesting occurrence of an excessive quantity of iron in the livers of anæmic patients has been noted in Germany. Stahel and Lindenlang each describe a case. The *Lancet* says that Marchand has lately described the liver of a phthisical patient, aged sixty years, which presented an unusual brownish-red color, associated with evident cirrhosis. The microscope showed an infiltration of the hepatic cells and of the interstitial connective tissue by pigmentary corpuscles, which gave the characteristic test for iron with yellow ferrocyanide. A chemical analysis showed that the ashes contained not less than 30 per cent. of iron. It has been supposed that the excess of iron is the result of an abnormal destruction of red blood-corpuscles in the organ, but it is open to question whether it is more than the result of the free administration of iron by the mouth.

Treatment for Gout.

Dr. N. S. Davis, of Chicago, recommends forty drops of an equal mixture of the acetated tincture of opium and wine of colchicum seeds, to control acute paroxysms of gout. This dose may be repeated in an hour, if necessary. Oftentimes one or two doses will abort what threatens to be a very severe attack. When the paroxysm is under control the same remedies may be continued in smaller doses, three or four times daily, if any gout remains. We have used this remedy, and can add our endorsement to this distinguished recommendation.

To Prevent Necessity for Inducing Abortion.

The *Obstetric Gazette*, quoting from *Deutsche Med. Zeit.*, says that Depaul recommends in all such cases of contracted pelvis which indicate the necessity for inducing premature labor, that an attempt be made to lessen the size of the

child, by administering iodide of potassium to the woman.

He claims that this treatment was successful in a case of his, in which the conjugate of the true pelvis was from 7½ to 7¾ ctm. The previous three labors, in which she had no treatment, were very tedious and exhausting, while in this one labor came on at term, spontaneous and easy, the child living.

Correspondence.

Solution Ferrous Malate.

Ed. Med. and Surg. Reporter:—

Much attention has been given, of late, in many medical journals, to the use of the different preparations of iron. In your last week's issue I noticed the advertisement of the Solution Ferrous Malate. Having used this valuable chalybeate quite extensively in my practice, I have felt a desire to add my mite of testimony in the use of this remedy, for what it is worth. I commenced the use of Solution Ferrous Malate (as manufactured by the American Pharmaceutical Manufacturing Company) in my practice in April, this year, the first bottle having been sent to me by the manufacturing chemist, to give it a trial. I determined to test its virtues, and was so much pleased with the result that it has been adopted in my practice, and I have since the above stated time prescribed some 30 pounds. No objections to it, in any manner, have been made by any patients to whom I have prescribed it, and I shall continue to do so, believing it to be one of the most valuable and beautiful preparations of iron to which medical men have access in these days of intelligent and refined pharmacy. It has the following advantages, which increases its value to physicians: it exerts the therapeutic influence of iron without creating nausea, constipation, headache, or any of the unpleasant effects so often resulting from the use of the ordinary forms of iron. It is a proto-compound, very palatable, and readily assimilated. It forms clear solutions with compounds containing tannin, such as the gentian and cinchona preparations, properties which cannot be claimed for any ferruginous preparation of the Pharmacopœia.

G. T. Fox, M.D.

Bath, Pa.

News and Miscellany.

American Academy of Medicine.

The American Academy of Medicine met in this city, October 26th and 27th. The annual address was read by the President, Professor Traill Green, A.M., M.D., LL.D., of Easton, Pa. He referred to the organization of the Academy in this city, six years ago. He said one of the greatest obstacles to the improvement of medical education in this country is the deficiency of sufficient preliminary education in those who enter the profession. It is well known that but a very small proportion have had such previous training as is absolutely necessary in order to begin with advantage the study of a science. In 1876 the Medical School of Harvard was the only school in the country which required a preliminary examination of intending medical students. Now there are thirteen colleges which require the diplomas of a literary institution as a preliminary examination.

The President, in his address, also offered a number of practical suggestions.

The nominating Committee presented a report, which was adopted, and the following officers were elected to serve the ensuing year: President, Dr. Henry O. Marcy, Massachusetts; Vice-Presidents, Drs. George M. Beard, New York; William Elmer, Bridgeton, New Jersey; Cornelius R. Agnew, New York; Thomas M. Drysdale, Philadelphia; Secretary and Treasurer, Dr. R. J. Dunglison, Philadelphia; Assistant Secretary, Dr. Charles McIntire, Jr., Easton, Pa.

Drs. James M. Barton and Thomas B. Reed, of Philadelphia, were elected Fellows of the Academy.

On motion of Dr. Steiner, of Frederick, Md., it was agreed that at future meetings a collation shall be served after the delivery of the annual address.

Drs. Henry Frazer Campbell, of Georgia, and Austin Flint, Sr., of New York, were elected to honorary membership. A paper prepared by Dr. Nathan Allen, of Lowell, Mass., on the "Influence of Medical Men," was then read. It stated that at no former period in the history of medicine have the causes of disease been so carefully scrutinized. Never was there a time when the natural laws of disease could be studied to so good advantage—the principal cause and real nature of every distinct disease, and to learn that the whole mystery concerning disease arises mainly from ignorance. The profession has been inclined in the past to use altogether too much medicine, both in quantity and variety, which has produced serious evils. Drugs can never mend broken limbs, neither can they restore the system to a perfectly sound and healthy state when its inherent laws have been repeatedly violated. Medical practice can never be reduced to a true system of test or science until the causes and laws of diseased action are better understood. Formerly *cure* was the supreme if not the leading object of the physician, but the time is fast approaching when *prevention* will be the watchword. No one question is coming before the public of such vital importance and magnitude as the prevention of disease, under the head of sanitary science. Its principles extend to the school, to the family, to the State, and to the Church.

Dr. Dunglison, from the Committee on Laws Relating to the Practice of Medicine in the United States, presented a supplemental report, which was referred to the Council, and the Committee continued.

Dr. Benjamin Lee, of Pennsylvania, said, this State, he was sorry to say, was one of the last to take steps toward the establishment of a State Board of Health.

Dr. Robert Lowry Sibbet, of Carlisle, Pa.,

said that this State was the home of quackery, and the city of Philadelphia had done a great deal to disgrace them. Over 6000 physicians have registered, 838 without diplomas. He then read a supplement to the Registration Act, to be passed by the Legislature in case of the establishment of a State Board of Health. It gives the Board of Health the power of receiving the registration of all practitioners of medicine and surgery.

Dr. Cornelius R. Agnew, of New York, said there was some discouragement in his State with regard to laws for the prevention of irregular practice. He had understood that, in consequence of the Registration laws of Illinois, about 2000 irregular practitioners have been driven out of that State.

Professor S. D. Gross, of this city, said he took a deep interest in this association, and was convinced the trees now planting by them would bear good fruit.

Dr. Charles McIntire, Jr., of Easton, Pa., read a paper on "The Academy and the Profession." It stated that in the Cumberland, Dauphin and Northampton counties, Pa., Medical Societies, and in the Medical Societies of Cumberland, Hunterdon, Monmouth, Salem, Warren and Atlantic counties, New Jersey, there were 222 members. Of this number, 28, or 12.6 per cent., were A. B.'s; 16, or 7.2 per cent., took parts of courses; and 178, or 80.2 per cent., had no college training. In 58 universities and colleges in the United States since 1820, there have been 38,054 alumni. Of this number, 3577, or 9.2 per cent., were graduates in medicine. The whole number of schools reported in 1879 was as follows:—Medicine, 68; Theology, 133; Law, 49. In 1880, Medicine, 72; Theology, 142; Law, 48. Number reporting no students at all: In 1879, Medicine, 2; Theology, 10; Law, 6. In 1880, Medicine, 5; Theology, 9; Law, 4. Actual number on which to base statistics: In 1879, Medicine, 66; Theology, 123; Law, 43. In 1880, Medicine, 67; Theology, 133; Law, 44. Number making no report of degrees in Arts and Science: In 1879, Medicine, 39; Theology, 58; Law, 19. In 1880, Medicine, 37; Theology, 68; Law, 18. Percentage of whole: In 1879, Medicine, 59.1; Theology, 43.1; Law, 44.2. In 1880, Medicine, 55.2; Theology, 51.1; Law, 41.0. Number of students reported by these schools: In 1879, Medicine, 5614; Theology, 2092; Law, 1218. In 1880, Medicine, 5279; Theology, 2537; Law, 768. Percentage of whole: In 1879, Medicine, 60.9; Theology, 48.0; Law, 40.3: In 1880, Medicine, 53.6; Theology, 49.9; Law, 24.5. Percentage of students in the schools reporting degrees in arts and sciences who have such degrees: In 1879, Medicine, 20.0; Theology, 59.0; Law, 43.0. In 1880, Medicine, 16.9; Theology, 52.6; Law, 32.0.

Only a small percentage of the estimated 83,000 practitioners of medicine in the United States are eligible for membership to the Academy, and only a small proportion of the graduates in arts study medicine. The need of a thorough preparation for medical men is certainly the cause for the Academy's existence, and the methods which will best cause this need to be felt are the methods which should claim the attention of the Academy.

If every practitioner in the country, or even a large majority, possessed the qualifications for fellowship, there would have been no reason for organizing the Academy.

After the induction into office of the President-elect, Dr. Henry O. Marcy, and the appointment of Dr. Benjamin Lee, of Philadelphia, and Dr. L. D. Bulkley, of New York, to fill vacancies in his council, the Academy adjourned to meet in the city of New York in September, 1883.

Dr. Klein on Vaccin Charbonneux.

The *Lancet* says that Dr. Klein has arrived at conclusions (based upon comparatively few experiments) adverse to the general adoption in England of Pasteur's proposal to inoculate cattle with anthrax, as a prophylactic. After giving particulars as to the way in which M. Pasteur's agent sells the "vaccin charbonneux," the directions for the use of which say that the "premier vaccin" is to be used first, and after a lapse of from twelve to fifteen days the "deuxième vaccin" is used in the same manner, Dr. Klein goes on to relate his experience with it. "I have obtained through two independent sources two lots of this vaccin charbonneux (premier and deuxième), and have tested them by experiments. The results of these experiments enable me to say—(*a*) animals inoculated with this 'vaccin' (premier and deuxième) are not made immune against fatal anthrax; and (*b*) both the first and second vaccin may produce fatal anthrax. The following facts prove these propositions:—

"*Experiments with Lot A.*—Inoculated with 'premier vaccin,' two sheep, two guinea-pigs and two mice; no change in any animal. Inoculated with 'deuxième vaccin,' the two above sheep and the two above guinea pigs. One of these sheep showed rise of temperature and falling off in food for the first two days after this second inoculation, but was all right again after three days. The two guinea-pigs were dead of typical anthrax within forty-eight hours. The above mice were inoculated with the blood of one of these guinea-pigs. Both mice were dead of typical anthrax within forty-eight hours. The two sheep having been inoculated with the premier and deuxième vaccin, ought to have been immune against fatal anthrax. Now see what happened: according to M. Pasteur, the *Bacillus anthracis* of blood of an animal dead of anthrax, when cultivated at 42°-43° C. for twelve days, loses all virulence and becomes thereby converted into 'vaccin.' I had grown the *Bacillus anthracis* of blood of a guinea-pig dead of anthrax at a temperature of 42°-43° C. for *twenty-one* days, and with this culture I inoculated the above two sheep. The result was that both animals were dead of typical anthrax within forty-eight hours.

"*Experiments with Lot B.*—Inoculated with 'premier vaccin' four guinea-pigs and six mice. Within forty-eight hours three of the guinea-pigs and three of the mice were dead of typical anthrax. My method of using the fluids for in-

oculation absolutely precludes any accidental contamination, and hence these must be accepted as perfectly reliable. This country is comparatively free from anthrax, and therefore the introduction and use of this so-called 'vaccin charbonneux' seems to me most dangerous, and capable of producing incalculable mischief."

Ophthalmological Statistics in the United States.

The following interesting statistics are given by Dr. W. S. Little, in a recent article: The statistics of ophthalmic hospitals and ophthalmic work in general hospitals in the leading cities of the United States afford the following: Of 107,383 eye cases, 19,037 required surgical procedures, of which 862 were enucleation of the eye for some of the many forms of objective traumatism; principally on account of the dread of or presence of sympathetic irritation or sympathetic ophthalmia of the other eye; some for intraocular conditions, and a few for cosmetic purposes.

Thus 17.7 per cent. of ophthalmic work is operative, and 4.5 per cent. is enucleation of the eyeball. This percentage for the operation of removal of the eyeball should be higher than the statistics derived from the public clinics, as this class of cases are more apt to seek private advice.

The importation of artificial eyes is about ten thousand annually, and recently the manufacturing of them has become a home industry.

Cholera Rumors.

Some severe form of intestinal disorder has been recently raging in Chiapas and Tabasco. It is asserted to be Asiatic cholera. Cases alleged to be of the same character have been of late occurring at Matamoras. In fact, from various parts of Mexico and Central America there are disquieting rumors of the presence of this dreaded pestilence.

The Question of Population.

The following, from the *Med. Times and Gaz.*, is interesting: In general, in Europe, the increase of Catholics, Protestants and Jews, compared with each other, is as one, two, three; but in France and Austria the increase of Jews is four and seven times greater than that of Catholics. This does not depend upon the greater number of births among the Jews, which is usually inferior to that of Catholics and Protestants, but the number of illegitimate births is very much less among the Jews than among the other inhabitants; and as the mortality of infants is especially noteworthy in the category of illegitimate children, the result is that, although the Jews have fewer infants than the Catholics and Protestants, they preserve a greater number of them. Another curious fact is the sex of the children. In the European population in general, this is about one hundred and five male to one hundred female births; but in most countries where Jews abound, as Russia, Prussia, Austria and Hungary, the proportion of male births rises to one hundred and ten, one hundred and twenty, or even to one hundred and thirty, instead of one hundred and five; and M. Lagneau attributes this great predominance of male births among the Jews to the fact of the early age at which they marry.

The Yellow Fever.

Nearly 2000 cases of yellow fever at Pensacola is a frightful showing. Fortunately the type does not seem excessively malignant. Meantime the local Board of Health there have fallen out, both with the city government and the U. S. Marine Hospital Service.

Items.

Errata.—In our issue of October 21st, page 463, line 13 from bottom, for one-sixteenth read *one-sixtieth;* line 12, for one-twentieth read $\frac{1}{120}$.

—A memorial statue of the eminent ophthalmologist, Albrecht von Grafe, was recently unveiled, in the University of Berlin, in the presence of a large assemblage.

—According to M. Dareste (*Comptes Rendus*), monstrosities may be produced, in birds, by simply prolonging the interval between the laying of the eggs and the commencement of incubation.

—An old lady who lives in Massachusetts heard that Mr. John Bright was going to visit this country. "Well," said she, "I hope he won't bring his disease with him."

QUERIES AND REPLIES.

A. McM. Mich. Dr. A. did violate the courtesy of the profession by the act described.

W. S. D., Pa. The following is a very good formula for making Bitter Wine of Iron.

℞.	Ferri quiniæ citrat.,			
	Ferri et ammonii citrat.,	aa	ʒj	
	Syr. simp.,		Oiiss	
	Aquæ,		Oss	
	Ol. aurant.,		gtt xxv	
	Vin. xerici.,	q.s. ad	Cj.	M.

MARRIAGES.

GRAHAM—SHRADY.—At the St. James Methodist Episcopal Church, New York, by the Rev. Albert D. Vail, Thursday, October 12th, Mr. James Lorimer Graham and Miss Margaret Frances, daughter of Dr. John Shrady, all of New York.

SCOTT—CLARK.—In Wellsville, O., at the residence of the bride's mother, Mrs. Sarah F. Clark widow of the late Rev. S. W. Clark, Thursday, October 12th, 1882, by Rev. J. A. Bailey, Robert E. Scot M.D., of Bowerston, O., and Miss Agnes Clark, Wellsville, O.

DEATHS.

YOUNG.—At Galveston, Texas, Aug. 3d, 1882, G. K. Young, in the 46th year of his age. Dr. You was a graduate of the Jefferson Medical College.